

ON0146A NP

1/53

FIG. 1

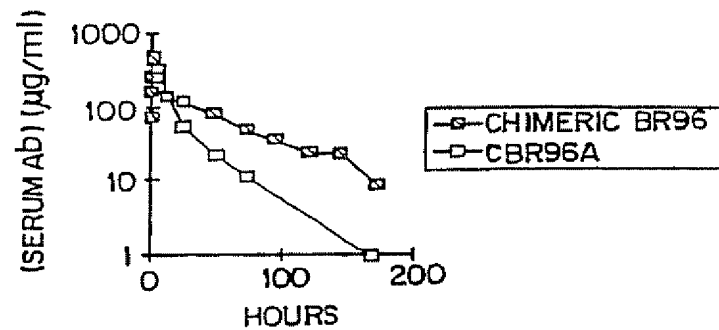


FIG. 2

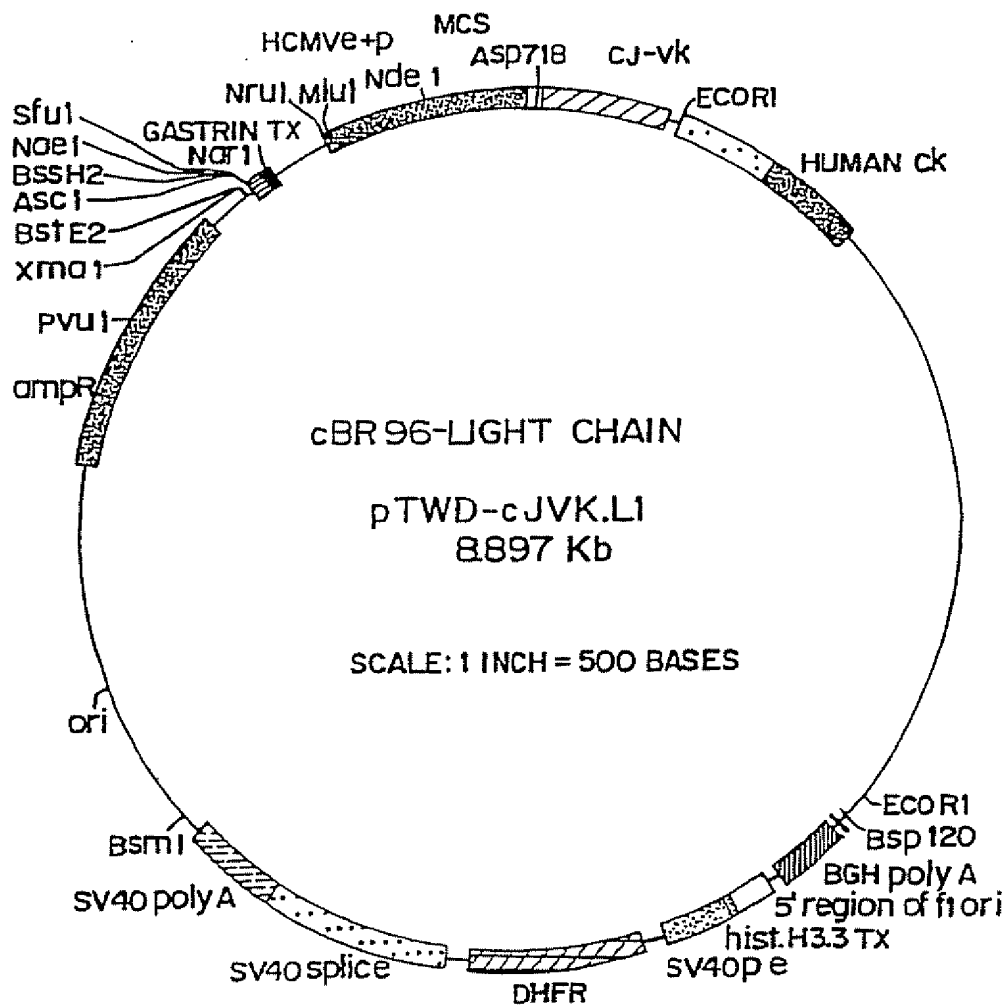
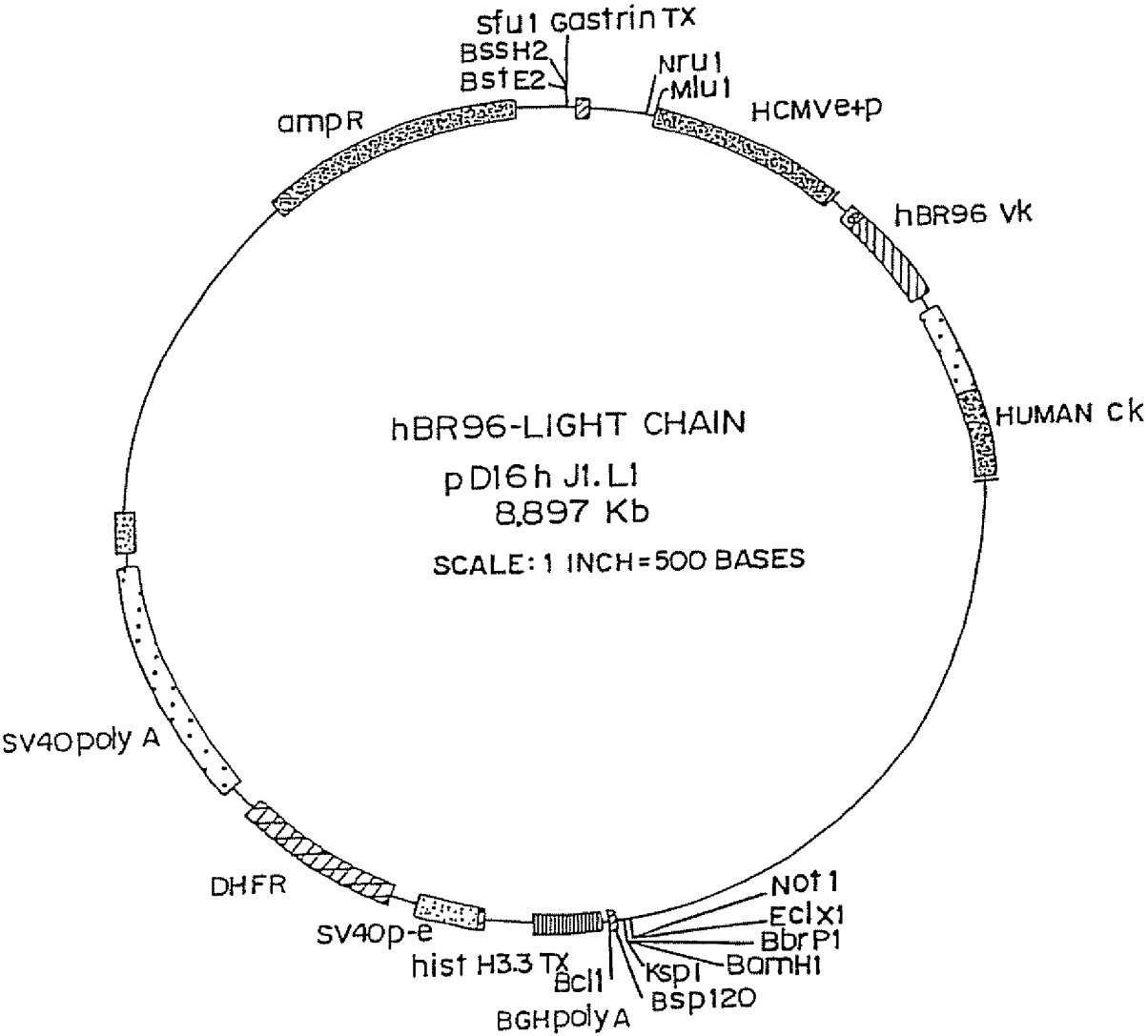


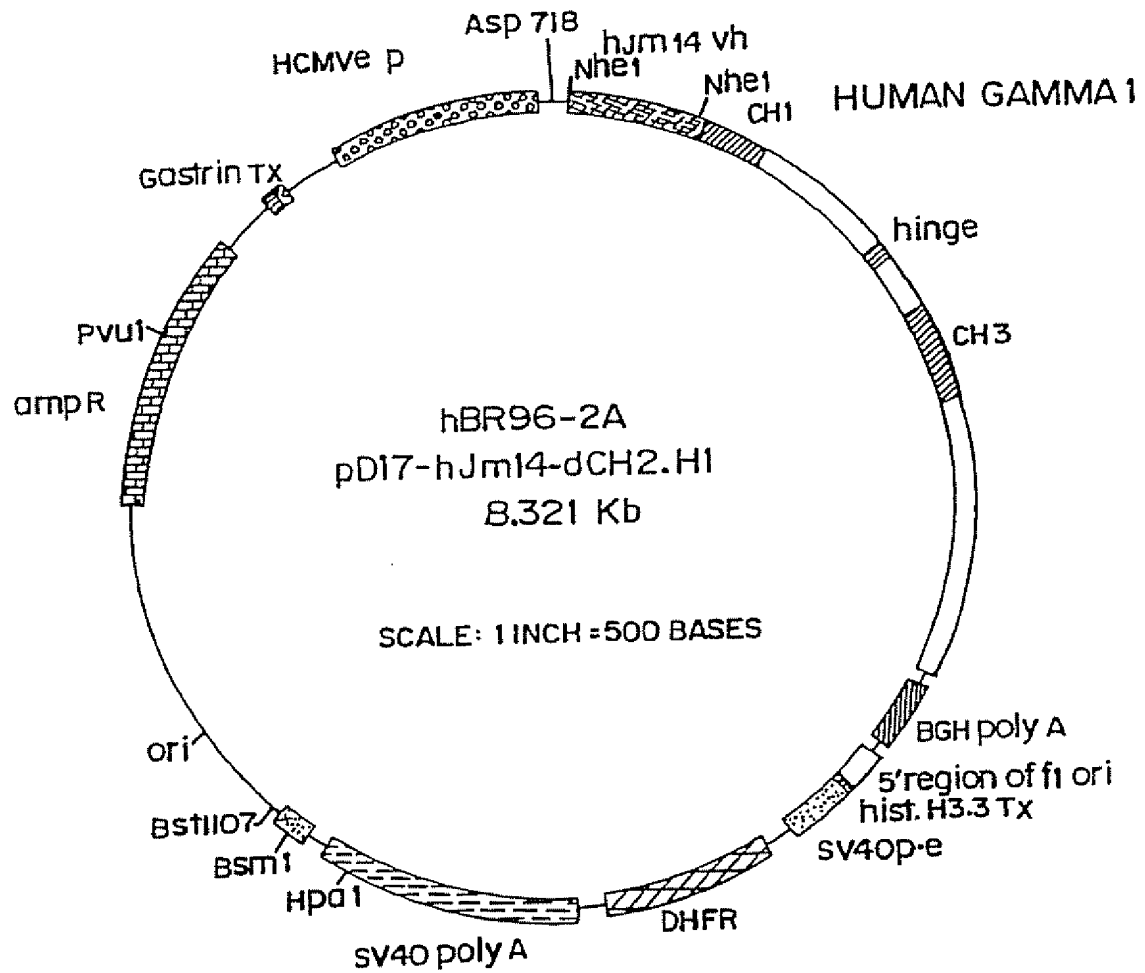
FIG. 3



ON0146A NP

3/53

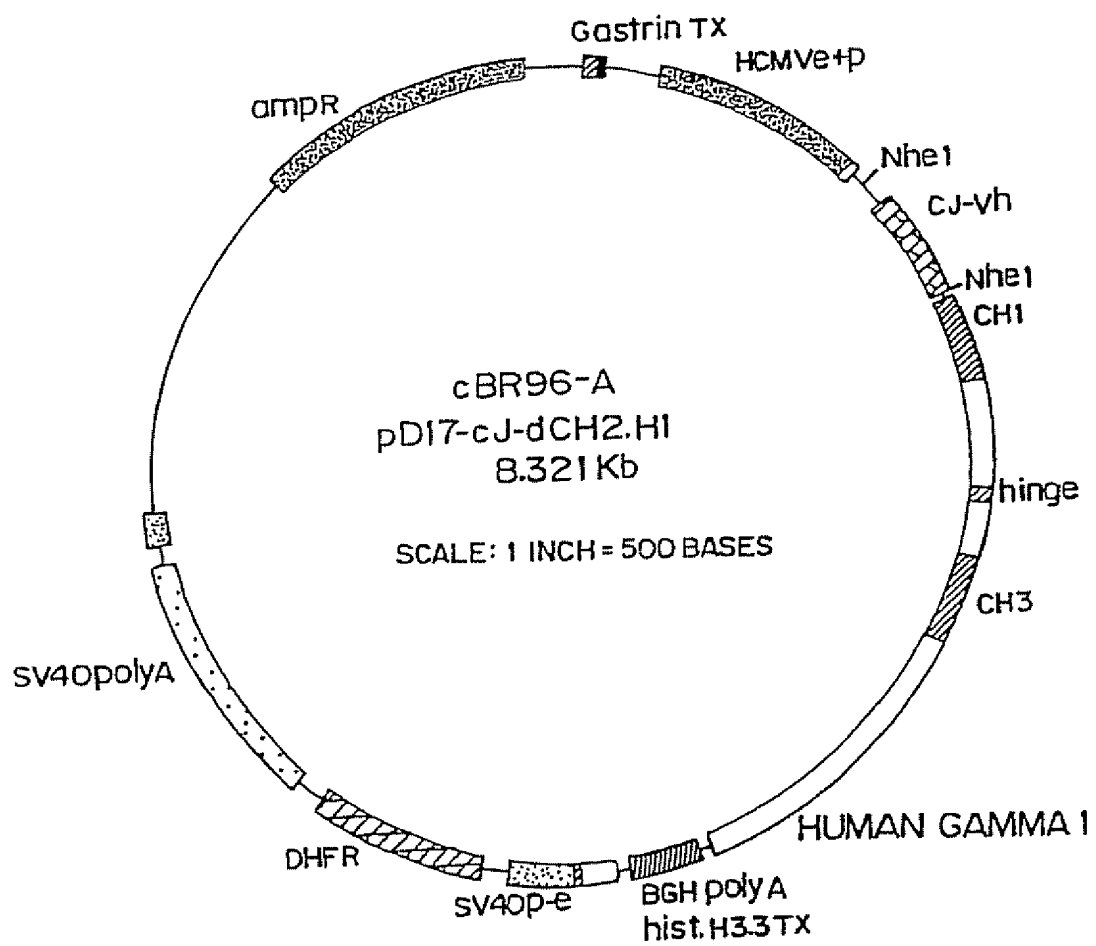
FIG. 4



ON0146A NP

4/53

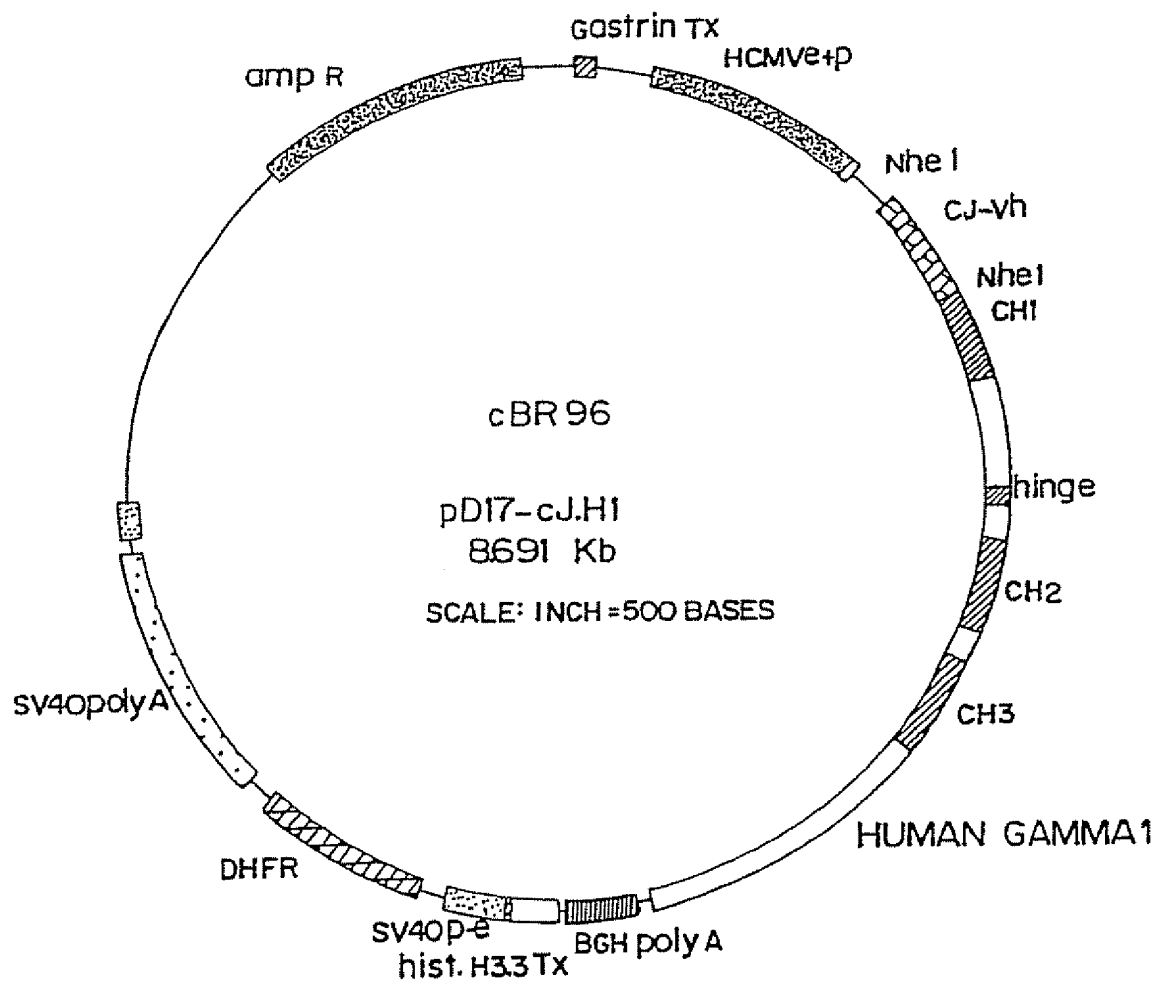
FIG. 5



ON0146A NP

5/53

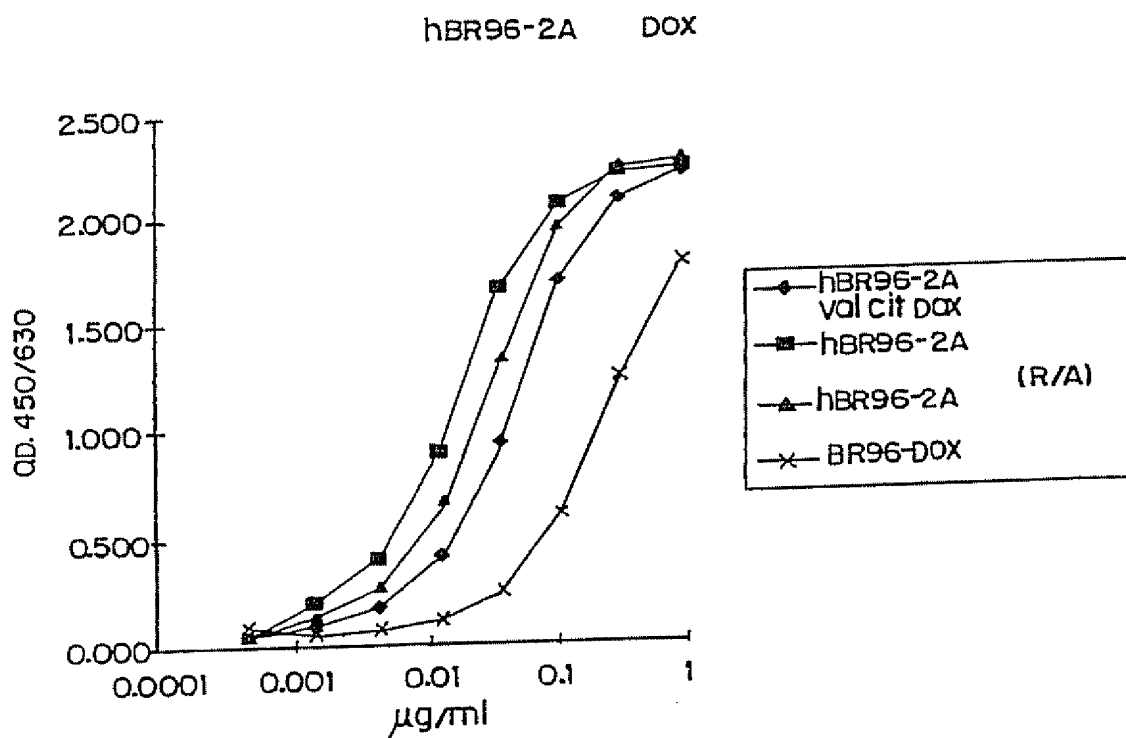
FIG. 6



ON0146A NP

6/53

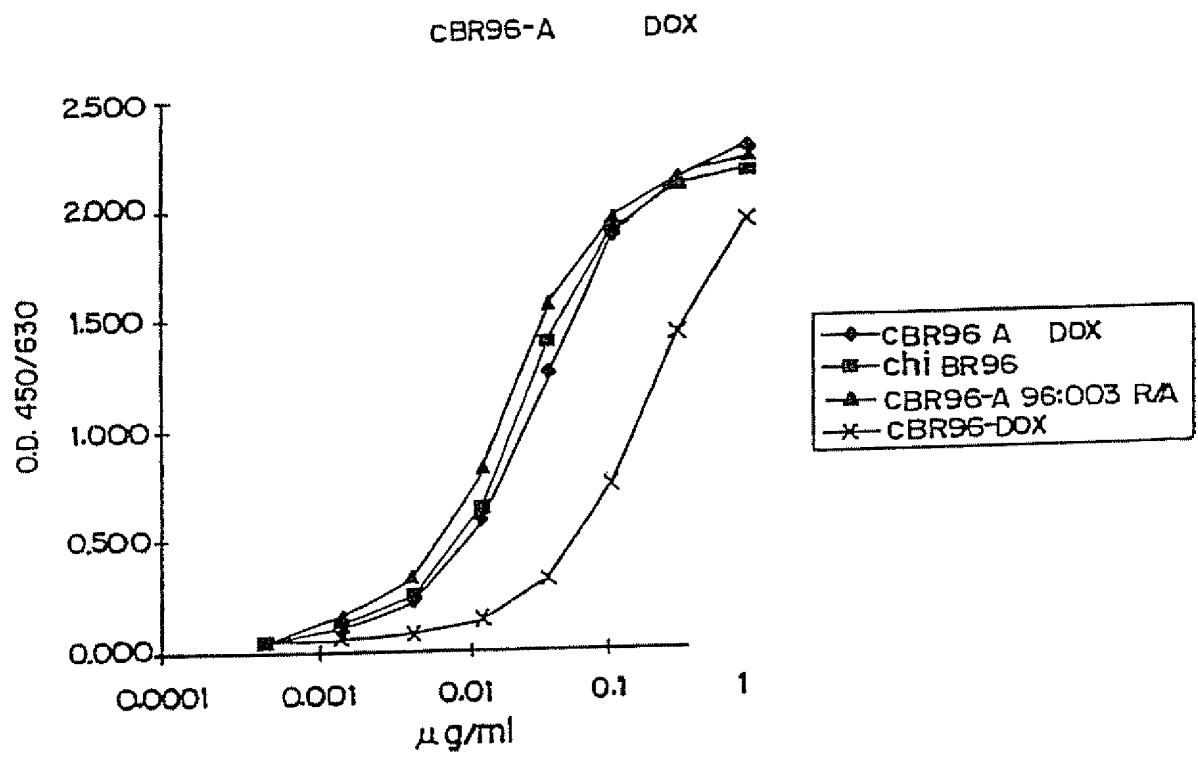
FIG. 7



ON0146A NP

7/53

FIG. 8



ON0146A NP

8/53

FIG. 9A

A-HINGE + CH2 + CH3 DOMAINS WERE REMOVED FROM BR96 IGG1
CONSTRUCT BY E.CO.47-III RESTRICTION DIGESTION.

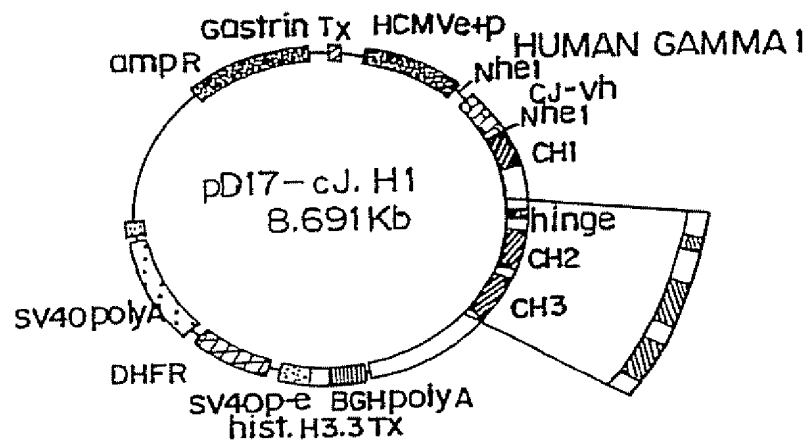
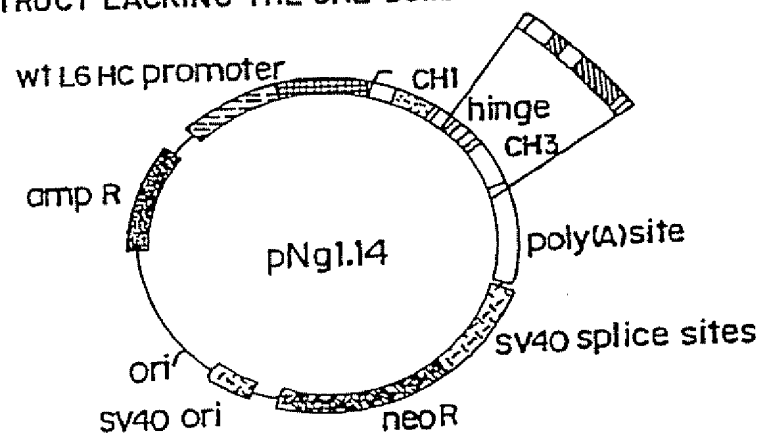


FIG. 9B

B-HINGE+CH3 DOMAINS AMPLIFIED BY PCR FROM L6 IGG1
CONSTRUCT LACKING THE CH2 DOMAIN.

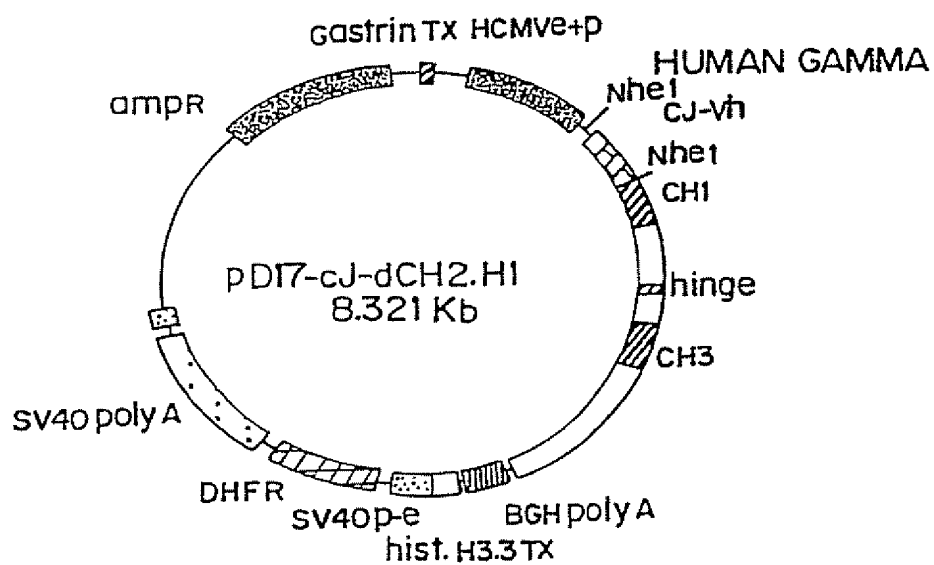


ON0146A NP

9/53

FIG. 9C

C-HINGE+CH3 PCR FRAGMENT CLONED BY HOMOLOGOUS
RECOMBINATION INTO E.CO.47-III SITE OF BR96 IGGI MOLECULE.



10/53

1.- INTRODUCTION OF MUTATIONS BY SITE DIRECTED
MUTAGENESIS ON DOUBLE-STRANDED PLASMID DNA.

FIG. 10A

A.- MUTATIONS INTRODUCED INTO SYNTHETIC OLIGONUCLEOTIDES
USED FOR THE PCR AMPLIFICATION OF CH2 DOMAIN

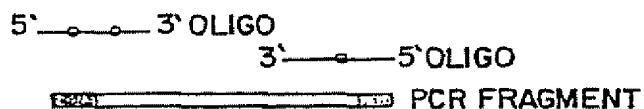


FIG. 10B

B.- PLASMID DNA LINEARIZED INSIDE CH2 DOMAIN AND CO-
TRANSFORMED WITH PCR FRAGMENT INTO COMPETENT DH5 α

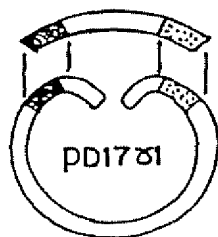
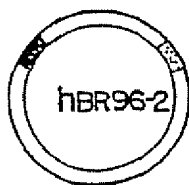


FIG. 10C

C.- CLONING MEDIATED BY HOMOLOGOUS RECOMBINATION YIELDS
TRANSFORMANTS HARBOURING RECOMBINANT PLASMIDS.



ON0146A NP

11/53

FIG. 11

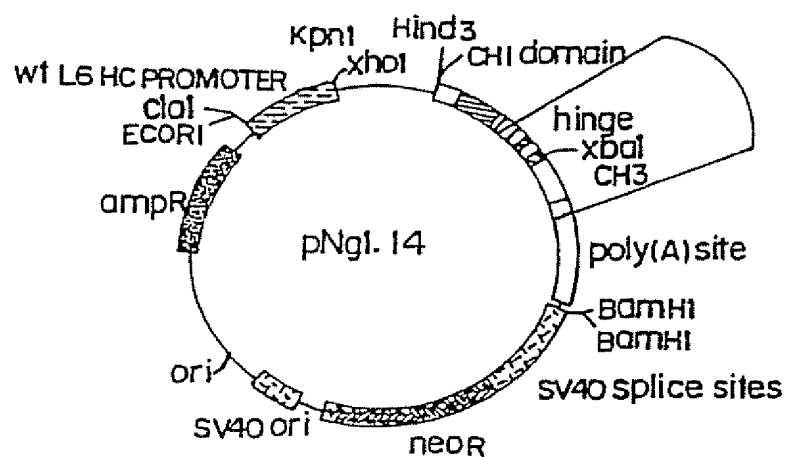


FIG. 12

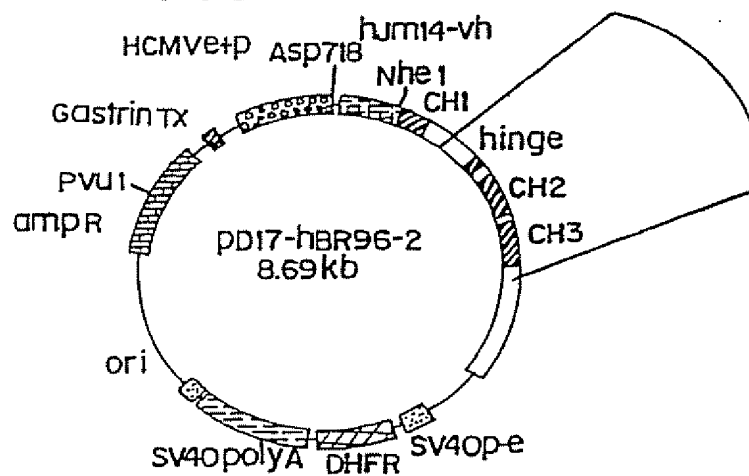
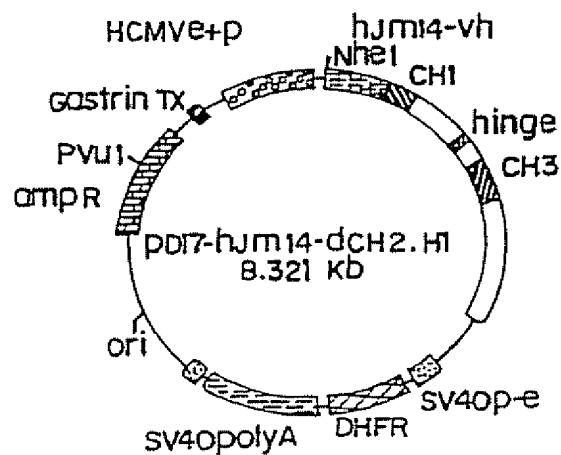


FIG. 13



ON0146A NP

12/53

FIG. 14A

Primary Sequence = SEQ ID NO:10

Complementary Sequence = SEQ ID NO:28

pd17-cj-dch2.H1

10	20	30	40	50	60	70	80	90
GACGGATCGG	GAGATCTGCT	AGGTGACCTG	AGGCGCGCGG	GCTTCGAATA	GCCAGAGTAA	CCTTTTTTT	TAATTTTATT	TTATTTTATT
CTGCCTAGCC	CTCTAGACGA	TCCACTGGAC	TCCGCGCGGC	GGAAGCTTAT	CGGTCTCATT	GGAAAAAAA	ATTAAAAATA	AATAAATAA
100	110	120	130	140	150	160	170	180
TTTGAGATGG	AGTTTGGCGC	CGATCTCCCG	ATCCCTTATG	GTCGACTCTC	AGTACAATCT	GCTCTGATGC	CGCATAGTTA	AGCCAGTATC
AAACTCTACC	TCAAAACCGG	GCTAGAGGGC	TAGGGGATAC	CAGCTGAGAG	TCATGTTAGA	CGAGACTACG	GGGTATCAAT	TCGGTCTATG
190	200	210	220	230	240	250	260	270
TGCTCCCTGC	TTGTGTGTTG	GAGGTGGCTG	AGTAGTGGGC	GAGCAAAATT	TAGCTACAA	CAAGGCAAGG	CTTGACCCGAC	AATTGCATGA
ACGAGGGACG	AACACACAC	CTCCAGCGAC	TCATCACGGG	CTCGTTTAA	ATTCCATGTT	GTTCCGTTCC	GAACCTGGCTG	TTAACGTAAT
280	290	300	310	320	330	340	350	360
AGAATCTGCT	TAGGGTTAGG	CGTTTTCGCG	TGCTTCGCGA	TGTACGGGCC	AGATATAAGC	GTTGACATTG	ATTATTTGACT	AGTTATTAAAT
TCTTAGACGA	ATCCCAATCC	GCAARACGCG	ACGAGCGGCT	ACATGCCCGG	TCTATATGCG	CAACTGTAACT	TAATPACTGA	TCAATAATTA
370	380	390	400	410	420	430	440	450
AGTAATCAAT	TACGGGGTCA	TTAGTTCAATA	GCCCATATAT	GGAGTTCCGC	GTTACATTAAC	TTACGGTAAA	TGGCCCCGCT	GGCTGACCCG
TCATTAGTTA	ATGCCCCAGT	AATCAAGTAT	CGGGTATATA	CCTCAGGCG	CANTGTATTG	AATGCCATTT	ACCGGGCGGA	CCGACTGGCG
460	470	480	490	500	510	520	530	540
CCAACGACCC	CGGCCCATTG	ACGTCAATAA	TGACGTATGT	TCCCAATAGTA	ACGCCAATAG	GGACTTTCCA	TTGACGCTCA	TGGGTGGACT
GGTTGCTGGG	GGCGGGTAAC	TGCAGTTATT	ACTGCATACA	AGGATATCAT	TGCGGTTATC	CCTGAAAGGT	AACCTGCAGTT	ACCCACCTGA
550	560	570	580	590	600	610	620	630
ATTACGGTA	AACCTGCCAC	TTGGCAGTAC	ATCAAGTGA	TCATATGCCA	AGTACGCCCC	CTATTGACGT	CAATGACGGT	AAATGCCCCG
TAAATGCCAT	TTGACGGGGT	AACCGTCATG	TAGTTCAAT	AGTATACGGT	TCATGCCGGG	GATAACTGCA	GTTACTGCCA	TTTACCGGGC
640	650	660	670	680	690	700	710	720
CCTGGCATTA	TGCCCCAGTAC	ATGACCTTAT	GGGACTTTCC	TACTTGGCAG	TACATCTACG	TATTAGTCAAT	CCCTATTACC	ATGGTGATGC
GGACCTAANT	ACGGGTCATG	TACTGGGAATA	CCCTGAAAGG	ATGAACCGTC	ATGTAGATGC	ATATATCAGTA	GGCATATGG	TACCACATCG
730	740	750	760	770	780	790	800	810
GGTTTGGCA	GTACATCAAT	GGGCGTGGAT	AGCGGTTTGA	CTCACGGGGA	TTTCCAGTCC	TCCACCCCAT	TGACGTCAAT	GGGAGTTTGT
CCAAAACCGT	CATGTAGTTA	CCCGCACCTA	TCCGCCAACT	GAGTGCCCCC	AAGGTTTCAG	AGGTGGGATA	ACTGCAGTTA	CCCTCAACA
820	830	840	850	860	870	880	890	900
TTTGGCACCA	AAATCAACGG	GACTTTCCAA	AATGTCGTAA	CNACTCCGCC	CCATTGACGC	AAATGGCGG	TAGGCGTGTA	CGGTGGGAGG
AAACCGTGGT	TTTAGTTGCC	CTGNAAGGTT	TTACAGCATT	GTTGAGCGCG	GGTAACTGCG	TTTACCCGCC	ATCCGCACAT	GCCACCCCTCC

13/53

FIG. 14B

Primary Sequence = SEQ ID NO:10

Complementary Sequence = SEQ ID NO:28

pd17-eJ-dCH2.H1

910	920	930	940	950	960	970	980	990
TCATATAAG	CAGAGCTCTC	TGGCTAACTA	GAGAACCCAC	TGCTTACTGG	CTTATCGAA	TTAATACGAC	TCATATAGG	GAGACCCAG
AGATATATTC	GTCTCGAGAG	ACCGATTGAT	CTCTTGGGTG	ACGAATGACC	GAATAGCTTT	AATTATGCTG	AGTGATATCC	CTCTGGGTTC
1000	1010	1020	1030	1040	1050	1060	1070	1080
CTTGGTACCA	ATTTTAAATTG	ATATCTCCTT	AGGTCTCGAG	TCTCTAGATA	ACCGGTCAAT	CGATTGGAAAT	TCTTGCGGCC	GCTTGTCTAGC
GAACCATGGT	TAAATTTAAC	TATAGAGGAA	TCCAGAGCTC	AGAGATCTAT	TGGCCAGTTA	GCTAACCTTA	AGAACGCCGG	CGAACGATCG
1090	1100	1110	1120	1130	1140	1150	1160	1170
CACCNTGGAG	TTGTGGTTAA	GCTTGGTCTT	TCCTTGTCTT	TGTTTTAANA	GGTGTCCAGT	GTGAAGTGAA	TCTGGTGGAG	TCTGGGGGAG
GTGGTACCCTC	AACACCAATT	CGAACCCAGGA	AGGAACAGGA	ACAAAATTTT	CCACAGGTCA	CACCTTCACTT	AGACCACCTC	AGACCCCTCTC
1180	1190	1200	1210	1220	1230	1240	1250	1260
GCTTAGTGCA	GCTTGGAGGG	TCCCTGAAAG	TCTCTCTGTG	AACCTCTGGA	TTCACCTTCA	GTGACTATTA	CATGTATTGG	GTTTCGCCAGA
CGAATCACGT	CGGACCTTCC	AGGGACTTTC	AGGGACACA	TTGGAGACCT	AAGTGAAAGT	CACCTGATAAT	GTACATAAACC	CAAGCGGTCT
1270	1280	1290	1300	1310	1320	1330	1340	1350
CTCCAGAGAA	GAGGCTGGAG	TGGGTGCGAT	ACNTTAGTCA	AGGTGGTGAT	ATAACCGACT	ATCCAGACAC	TGTAAAGSET	CGATTACCCA
GAGGTCTCTT	CTCCGACCCTC	ACCCAGCGTA	TGTAAATCAGT	TCCACCCACTA	TATTGGCTGA	TAGGTCTGTG	ACATTTCCTCA	GCTAAGTGGT
1360	1370	1380	1390	1400	1410	1420	1430	1440
TCTCCAGAGA	CAATGCCAAG	AACACCCTGT	ACCTGCAAT	GAGCGTCTG	AAGTCTGAGG	ACACAGCCAT	GTATTACTGT	GCRAAGAGGEC
AGAGGTCTCT	GTTACGGTTC	TTGTGGGACA	TGGACGTTTA	CTCGGCAGAC	TTCAGACTCC	TGTGTCGGTA	CATATATGACA	CGTCTCCTCGG
1450	1460	1470	1480	1490	1500	1510	1520	1530
TGGACGACGG	GGCCTGTGTT	GCTTACTGGG	GCCAAAGGGAC	TCTGGTCACG	GTCTCTGTAG	CTAGCACCA	GGGCCCATCG	GTCTTCCCCC
ACCTGTCTGC	CCGGACCATA	CGAATGACCC	CGGTTCCCTG	AGACCAGTGC	CAGAGACATC	GATCGTGTGTT	CCCCGGGTAGC	CAGAAGGGGGG
1540	1550	1560	1570	1580	1590	1600	1610	1620
TGGCACCTTC	CTCCNAGAGC	ACCTCTGGGG	GCACAGGGC	CCCTGGGCTGC	CTGGTCNAGG	ACTACTTCCC	CGAACCGGTG	ACGGTGTCTGT
ACCGTGGGAG	GAGGTCTCTG	TGGAGACCCC	CGTGTGCGCG	GGACCCGACG	GACCAGTTCC	TGATGAAGGG	GCTTGGCCAC	TGCCACAGCA
1630	1640	1650	1660	1670	1680	1690	1700	1710
GGNACTCAGG	CGCCCTGACC	AGCGGGGTGC	ACACCTTCCC	GGCTGTCCCTA	CAGTCCCTCAG	GACTCTACTC	CCTCAGCAGC	GTGGTCAACCG
CCTTGAGTCC	GCGGGACTGG	TCCGCCGACG	TGTGGAAGGG	CCGACAGGAT	GTGAGGAGTC	CTGAGATGAG	GGAGTCTCTCG	CACCAGTGGC
1720	1730	1740	1750	1760	1770	1780	1790	1800
TGCCCTCCAG	CAGCTTGGGC	ACCCAGACCT	ACATCTGCAA	CGTGAATCAC	AAGCCCAGCA	ACACCAAGGT	GGACAGANA	GTTGGTGAAGA
ACGGGAGGTG	GTGNAACCG	TGGGTCTGGA	TGTAGACGTT	GCACCTTAGTG	TTCGGGTCCG	TGTGGTCCCA	CCTGTTCTTT	CAACCACTCT

ON0146A NP

14/53

FIG. 14C

Primary Sequence = SEQ ID NO:10
 Complementary Sequence = SEQ ID NO:28

pD17-cJ-dCH2.H1

1810	1820	1830	1840	1850	1860	1870	1880	1890
GGCCAGCACA	GGGAGGAGG	GTGTCGTG	GAAGCAGGC	TCAGCGCTCC	TGCCTGGACG	CATCCCGGCT	ATGCAGCCCC	AGTCCAGGGC
CCGGTCGTGT	CCCTCCCTCC	CACAGACGAC	CTTCGGTCCG	AGTCGGGAGG	ACGACCTGTC	GTAGGGCCGA	TAGGTGGGG	TCAGGTCCCG
1900	1910	1920	1930	1940	1950	1960	1970	1980
AGCAAGGCAG	GGCCCGTCTG	CCTCTTCACC	CGGAGGCCCTC	TGCCCGCCCC	ACTCATGCTC	AGGAGAGGG	TCTTCTGGCT	TTTTTCCCCAG
TCGTTCCGTC	CGGGGCAGAC	GGAGAAGTGG	GCCTCCGGAG	ACGGGCGGGG	TGAGTACGAG	TCCCTCTCCC	AGAAGACCGA	AAAAGGGGTC
1990	2000	2010	2020	2030	2040	2050	2060	2070
GCTCTGGGCA	GGCACAGGCT	AGGTGCCCT	AACCCAGGCC	CTGCACACAA	AGGGGCAAGT	GCTGGGCTCA	GACCTGCCAA	GAGCCATATC
CGAGACCCGT	CCGTGTCCGA	TCCACGGGGA	TTGGGTCCGG	GACGTGTGTT	TCCCCGTCCA	CGACCCGAGT	CTGGACGGTT	CTCGGTATAG
2080	2090	2100	2110	2120	2130	2140	2150	2160
CGGGAGGACC	CTGCCCCCTGA	CCTAAGCCCA	CCCCAAAGGC	CRAACTCTCC	ACTCCCTCAG	CTCGGACACC	TTCTCTCCTC	CCAGNTTCCA
GCCCTCCTGG	GACGGGGACT	GGATTCTGGT	GGGGTTTCCG	GTTTGAGAGG	TGAGGGAGTC	GAGCCTGTGG	AAGAGAGGAG	GGTCTAAGGT
2170	2180	2190	2200	2210	2220	2230	2240	2250
GTAATCCTCA	ATCTTCTCTC	TGCAGAGCCC	AAATCTTGTG	ACAAACTCA	CACATGCCCA	CCGTGCCAG	GTAAGCCAGC	CCAGGCTCTG
CATTGAGGTT	TAGAAGAGAG	ACGTCTCGGG	TTTAGAACAC	TGTTTGTAGT	GTGTACGGGT	GGCAGGGGTC	CATTCCGGTCG	GGTCCGGAGC
2260	2270	2280	2290	2300	2310	2320	2330	2340
CCCTCCAGCT	CAAGGCGGGA	CAGGTGCCCT	AGAGTAGCCT	GCATCCAGGG	ACACACCACG	TGGGTACCAA	CATGTCCGGA	GCCACATGGA
GGGAGGTCCA	GTTCCGGCCT	GTCCACGGGA	TCTCATCGGA	CGTAGGTCCC	TGTGTGTGTC	ACCCATGTTT	GTACAGGCCT	CGGTGTACCT
2350	2360	2370	2380	2390	2400	2410	2420	2430
CAGAGGCCGG	CTCGGCCAC	CCTCTGCCCT	GAGAGTGACC	GCTGTACCAA	CCTCTGTCCC	TACAGGGCAG	CCCCGAGAAC	CACAGGTGTA
GTCTCCGGCC	GAGCCGGGTG	GGAGACGGGA	CTCTCACTGG	CGACATGTTT	GGAGACAGGG	ATGTCCCCTG	GGGGCTCTTG	GTGTCCACAT
2440	2450	2460	2470	2480	2490	2500	2510	2520
CACCTGCCC	CCATCCCGGG	ATGAGCTGAC	CAAGAACCAG	GTCAGCCTGA	CCTGCCCTGGT	CAAAGGCTTC	TATCCCAGCG	ACATCGCCGT
GTGGGACGGG	GGTAGGGCCC	TACTCGACTG	GTTCTTGGTC	CAGTCGGACT	GGACGGACCA	GTTTCCGAAG	ATAGGGTCGC	TGTAGCGGCA
2530	2540	2550	2560	2570	2580	2590	2600	2610
GGAGTGGGAG	AGCAATGGGC	AGCCGGAGAA	CRACTACAAG	ACCACGCCCTC	CCGTGCTGGA	CTCCGACGGC	TCCCTTCTCC	TCTACAGCAA
CCTCACCCCTC	TCGTTACCCG	TCGGCCTCTT	GTTGATGTTT	TGGTGGGGAG	GGCAGGACCT	GAGGCTGCCG	AGGAAGAAGG	AGATGTCGTT
2620	2630	2640	2650	2660	2670	2680	2690	2700
GCTCACCGTG	GACAAGAGCA	GGTGGCAGCA	GGGGAACGTC	TTCTCATGCT	CCGTGATGCA	TGAGGCTCTG	CACACACACT	ACACGCAGAA
CGAGTGGCAC	CTGTTCTCGT	CCACCGTCGT	CCCCTTGCAG	AAGAGTACGA	GGCACTACGT	ACTCCGAGAC	GTGTTGGTGA	TGTGCTCTTT

ON0146A NP

15/53

FIG. 14D

Primary Sequence = SEQ ID NO:10
 Complementary Sequence = SEQ ID NO:28

pD17-cJ-dCH2.H1									
2710	2720	2730	2740	2750	2760	2770	2780	2790	
GAGCCTCTCC	CTGTCTCCGG	GTAAATGAGT	GCGACGGCCG	GCAAGCCCCC	GCTCCCCGGG	CTCTCGGGT	CGCAGGAGGA	TGCTTGGCAC	
CTCGGAGAGG	GACAGAGGCC	CATTACTCA	CGCTGCCGGC	CGTTCGGGG	CGAGGGGCC	GAGAGGCCA	GCCTGCTCCT	ACGAACCGTG	
2800	2810	2820	2830	2840	2850	2860	2870	2880	
GTACCCCCCTG	TACATACTTC	CCGGGCGCCC	AGCATGGAAA	TAAAGCACCC	AGCGTGCCC	TGGGCCCTTG	CGAGACTGTG	ATGGTTCTTT	
CATGGGGGAC	ATGTATGAAG	GGCCCGCGGG	TGCTACCTTT	ATTTCGTGG	TCGCGACGGG	ACCCGGGAC	GCCTGTACAC	TACCAAGAAA	
2890	2900	2910	2920	2930	2940	2950	2960	2970	
CCACGGGTCA	GGCCGAGTCT	GAGGCCTGAG	TGGCATGAGG	GAGGCAGAGC	GGGTCCCCT	GTCCCCACAC	TGGCCCCAGG	TGTGCAGGTG	
GGTGCCCACT	CCGGCTCAGA	CTCCGGACTC	ACCGTACTCC	CTCCGTCTCG	CCCAGGGTGA	CAGGGGTGTG	ACCGGGTCCG	ACACGTCCAC	
2980	2990	3000	3010	3020	3030	3040	3050	3060	
TGCCTGGGCC	CCCTAGGGTG	GGGCTCAGCC	AGGGGCTGCC	CTCGGCAGGG	TGGGGGATTT	GCCAGCGTGG	CCCTCCCTCC	AGCAGCACCT	
ACGGACCCCG	GGGATCCAC	CCCGAGTCGG	TCCCCGACGG	GAGCCGTCCC	ACCCCTAAA	CGGTCCAC	GGGAGGGAGG	TCGTCTGTGA	
3070	3080	3090	3100	3110	3120	3130	3140	3150	
GCCCTGGGCT	GGGCCACGGG	AAGCCCTAGG	AGCCCTGGG	GACAGACACA	CAGCCCTGTC	CTCTGTAGGA	GACTGTCTCTG	TTCTGTGAGC	
CGGGACCCGA	CCCGGTGCCC	TTCCGGGATCC	TCGGGGACCC	CTGTCTGTGT	GTCGGGGACG	GAGACATCCT	CTGACAGGAC	AAGACACTCG	
3160	3170	3180	3190	3200	3210	3220	3230	3240	
GCCCTGTCC	TCCCGACCTC	CATGCCCACT	CGGGGGCATG	CCTAGTCCAT	GTGGGTAGGG	ACAGGCCCTC	CCTCACCCAT	CTACCCCCAC	
CGGGACACAG	AGGGCTGGAG	GTACGGGTGA	GCCCCCGTAC	GGATCAGTA	CACGCATCCC	TGTCGGGAG	GGAGTGGGTA	GATGGGGGTG	
3250	3260	3270	3280	3290	3300	3310	3320	3330	
GGCACTAACC	CCTGGCTGCC	CTGCCCAGCC	TGCAACCCGC	ATGGGGACAC	AACCGACTCC	GGGGACATGC	ACTCTCGGGC	CCTGTGGAGG	
CCGTGATTGG	GGACCGACGG	GACGGGTCCG	AGCGTGGCG	TACCCCTGTG	TTGGCTGAGG	CCCTGTACG	TGAGAGCCCG	GGACACTCC	
3340	3350	3360	3370	3380	3390	3400	3410	3420	
GACTGGTGCA	GATGCCACACA	CACACACTCA	GCCCCAGCCC	GTTCACAAA	CCCCGCACTG	AGGTTGGCCG	GCCACACGGC	CACCACACAC	
CTGACCACGT	CTACGGGTGT	GTGTGTGAGT	CGGGTCTGGG	CAAGTTGTTT	GGGGCTGAC	TCCAACCCGC	CGGTGTGCCG	GTGGTGTGTG	
3430	3440	3450	3460	3470	3480	3490	3500	3510	
ACACGTGAC	GCCTCACACA	CGGAGCCTCA	CCCGGGCGAA	CTGCACAGCA	CCCAGACCCG	AGCAAGGTCC	TGCGCACAGT	GAACTCTCT	
TGTGCACGTG	CGGAGTGTGT	GCCTCGGAGT	GGGCTCGCTT	GACGTGTGCT	GGGTCTGGTC	TGCTTCCAGG	AGCGTGTGCA	CTTGTGAGGA	
3520	3530	3540	3550	3560	3570	3580	3590	3600	
CGGACACAGG	CCCCACGAG	CCCCACGGG	CACCTCAGG	CCCACAGCC	TCTCGGCAGC	TTCTCCACAT	GCTGACCCTG	TCAGACAAAC	
GCCTGTGTCC	GGGGGTGCTC	GGGGTGGGCC	GTGGAGTTCC	GGGTCTCTGG	AGAGCCGTGC	AAGAGGTGTA	CGACTGGACG	AGTCTGTGTG	

ON0146A NP

16/53

FIG. 14E

Primary Sequence = SEQ ID NO:10
 Complementary Sequence = SEQ ID NO:28

pD17-cJ-dCH2.H1

3610	3620	3630	3640	3650	3660	3670	3680	3690
CCAGCCCTCC	TCTCACAAGG	GTGCCCCCTGC	AGCCGCCACA	CACACACAGG	GGATCACACA	CCACGTCACG	TCCCTGGCCC	TGGCCCACTT
GGTCGGGAGG	AGAGTGTTC	CACGGGGACG	TCGGCGGTGT	GTGTGTGTCC	CCTAGTGTGT	GGTGACAGTC	AGGACCCGGG	ACCGGGTGNA
3700	3710	3720	3730	3740	3750	3760	3770	3780
CCCAGTGCCG	CCCTTCCCTG	CAGGACGGAT	CAGCCTCGAC	TGTGCCCTTCT	AGTTGCCAGC	CATCTGTTGT	TTGCCCTTCC	CCCGTGCCCTT
GGGTCACGGC	GGGNAAGGAC	GTCTTGCCCTA	GTCCGAGCTG	ACACGGAAGA	TCAACGGTCG	GTAGACAACA	AACGGGGAGG	GGGCACGGAA
3790	3800	3810	3820	3830	3840	3850	3860	3870
CCTTGACCCCT	GGAAGGTGCC	ACTCCCACCTG	TCCTTTCCCTA	ATAAATGAG	GAAATGTCAT	CGCATTTGCT	GAGTAGGTGT	CATTCTATTTC
GGAACTGGGA	CCTTCCACCG	TGAGGGTGCAC	AGGAAAGGAT	TATTTTACTC	CTTTAACGTA	GCGTAACAGA	CTCATCCACA	GTAAGATAAG
3880	3890	3900	3910	3920	3930	3940	3950	3960
TGGGGGGTGG	GGTGGGGCAG	GACAGCAAGG	GGGAGGATTG	GGNAGACAAAT	AGCAGGCATG	CTGGGGATGC	GGTGGGCTCT	ATGGCTTCTG
ACCCCCCACC	CCACCCCGTC	CTGTCTGTTCC	CCCTCCTAAC	CCTTCTGTTA	TCGTCCGTAC	GACCCCTACG	CCACCCGAGA	TACCGAAGAC
3970	3980	3990	4000	4010	4020	4030	4040	4050
AGGCGGAAG	AACCACTGG	GGCTCTAGGG	GGTATCCCCA	CGGCGCCTGT	AGCGGGGCAT	TAAGCCCGGC	GGGTGTGGTG	GTTACGCGCA
TCCGCCTTTC	TTGGTCGACC	CCGAGATCCC	CCATAGGGGT	GCGGGGACA	TCGCGCGCTA	ATTGCGCGCG	CCACACACCAC	CAATGCGCGT
4060	4070	4080	4090	4100	4110	4120	4130	4140
GCCTGACCGC	TACACTTGGC	AGCGCCCTAG	CGCCCGCTCC	TTTCGCTTTC	TTCCCTTCCCT	TTCTCGCCAC	GTTCGCGCGG	CCCTCTCAAAA
CGCACTGGCG	ATGTGAACGG	TCGCGGGATC	GCGGGCGAGG	AAAGCGAAG	AAGGGAAGGA	AAGAGCGGTG	CAAGCGGCCC	GGAGAGTTTT
4150	4160	4170	4180	4190	4200	4210	4220	4230
AAGGGAANA	AAGCATGCAT	CTCAATTAGT	CAGCAACCAT	AGTCCCGCCC	CTAACTCCGC	CCATCCCGCC	CCTAACCTCCG	CCCAGTTCCG
TTCCCTTTTT	TTCGTACGTA	GAGTTAATCA	GTGCTTGGTA	TCAGGGCGGG	GATTGAGGCG	GGTAGGGCGG	GGATTGAGGC	GGGTCAAGGC
4240	4250	4260	4270	4280	4290	4300	4310	4320
CCCATTTCTCC	GCCCCATGGC	TGACTAATTT	TTTTTATTTA	TGCAGAGGCC	GAGGCGCCT	CGGCCCTCTGA	GCTATTCCAG	AAGTAGTGAG
GGGTAAAGAG	CGGGGTACCG	ACTGATTAAG	AAAAATAAAT	ACGTCTCCGG	CTCCGGCGGA	GCCGGAGACT	CGATAAGGTC	TTCATCACTC
4330	4340	4350	4360	4370	4380	4390	4400	4410
GAGGCTTTTT	TGGAGGCCCTA	GGCTTTTGCA	ANAAGCTTGG	ACAGCTCAGG	GCTGCGATTT	CGCGCCAAAC	TTGACGGCAA	TCCTAGCGTG
CTCCGAAAAA	ACCTCCGGAT	CCGAAAACGT	TTTTTCGAAC	TGTCCAGTCC	CGACGCTAAA	GCGCGGTTTTG	AACTGCCGTT	AGGATCGCAC
4420	4430	4440	4450	4460	4470	4480	4490	4500
AAGGCTGGTA	GGATTTTATC	CCCCGTGCCA	TCATGGTTCC	ACCATTAAC	TGCATCGTCG	CCGTGTCCCA	AAATATGGGG	ATTGGCAAGA
TTCCGACCAT	CCTAAANTAG	GGGCGACGGT	AGTACCAAGC	TGGTAATTTG	ACGTAGCAGC	GGCACAGGGT	TTTATACCCC	TAAACGTTCT

ON0146A NP

17/53

FIG. 14F

Primary Sequence = SEQ ID NO:10
 Complementary Sequence = SEQ ID NO:28

pD17-cJ-dCH2.H1

4510	ACGGAGACCT	4520	ACCGTGCCT	4530	CCGCTCAGGA	4540	ACGAGTTCAA	4550	GTACTTCCRA	4560	AGAATGACCA	4570	CAACCTCTTC	4580	AGTGAAGGT	4590	AAACAGAAATC
	TGCCCTCTGGA		TGGGACCGGA		GGCGAGTCCT		TGCTCAAGTT		CATGAAGGT		TCTTACTGGT		GTGGAGAAG		TCACCTTCCA		TTTGCTCTTAC
4600	TGGTGATTAT	4610	GGGTAGGAAA	4620	ACCTGGTTCT	4630	CCATTCCCTGA	4640	GAGAATCGA	4650	CCTTTAAGG	4660	ACAGAATTAA	4670	TATAGTTCTC	4680	AGTAGAGAAAC
	ACCACTAATA		CCCATCCCTT		TGGACCAAGA		GGTAAGGACT		CTTCTTAGCT		GGAAATTTCC		TGTCTTAATT		ATATCAAGAG		TCATCTCTTG
4690	TCAAAGAAC	4700	ACCACGAGGA	4710	GCTCATTTTC	4720	TTGCCAAAAG	4730	TTTGGATGAT	4740	GCCTTAAGAC	4750	TTATTGAACA	4760	ACCGGAATTG	4770	GCAAAGTAAG
	AGTTTCTTGG		TGGTGCTCCT		CGAGTAAAG		AACGGTTTTC		AAACCTACTA		CGGAATTCG		AATFACCTGT		TGSCCTTAAC		CGTTCAATTC
4780	TAGACATGGT	4790	TTGGATAGTC	4800	GGAGGCAGTT	4810	CTGTTTACCA	4820	GGAGCCATG	4830	AATCAACCCAG	4840	GCCACCTTAG	4850	ACTCTTTGTG	4860	ACNAGGATCA
	ATCTGTACCA		AACCTATCAG		CCTCCGTCAA		GACAAATGGT		CCTTCGGTAC		TTAGTTGGTC		CGGTGGAATC		TGAGAAACAC		TGTTCCCTAGT
4870	TGCAGGAAT	4880	TGAAGTGAC	4890	ACGTTTFTCC	4900	CAGAAATTGA	4910	TTTGGGGAAA	4920	TATAAACTTC	4930	TCCCAGAATA	4940	CCCAGGCGTC	4950	CTCTCTGAGG
	ACGTCCCTTAA		ACTTTCACCTG		TGCAAAAGG		GTCTTTAACT		AAACCCCTTT		ATATTTGAAG		AGGTCCTTAT		GGGTCCCGCAG		GAGAGACTCC
4960	TCCAGGAGGA	4970	AAAGGCATC	4980	AAGTATAGT	4990	TTGAAGTCTA	5000	CGAGAAGAAA	5010	GACTAACAGG	5020	AAAGTGCTTT	5030	CAAGTTCTCT	5040	GCTCCCCCTCC
	AGGTCTCTCCT		TTTTCCCGTAG		TTCTATATTCA		AACTTCAGAT		GCTCTTCTTT		CTGATTGTCC		TTCTACGAAA		GTTCAGAGAGA		CGAGGGGAGG
5050	TAAAGCTATG	5060	CATTTTATA	5070	AGACCATGGG	5080	ACTTTTGCTG	5090	GCCTTAGATC	5100	TCTTTGTGAA	5110	GGAACTTAC	5120	TTCTGTGGTG	5130	TGACATAATT
	ATTTTCGATAC		GTAAAATAT		TCTGGTACCC		TGAAAACGAC		CGAANTCTAG		AGAAACACTT		CCTTGGATG		AAGACACCCAC		ACTGTATTAA
5140	GGACAAACTA	5150	CCTACAGAGA	5160	TTTAAAGCTC	5170	TAAGGTAAAT	5180	ATAAAAATTT	5190	TAAGTGTATA	5200	ATGTGTAA	5210	CTACTGATTC	5220	TAATGTGTTG
	CCTGTTTGAT		GGATGTCTCT		AAATTTGAG		ATTCCATTTA		TATTTTAAAA		ATTTCACATAT		TACACAATTT		GATGACTAAG		ATTAACAAAC
5230	TGTATTTTAG	5240	ATTCCAACTT	5250	ATGGAACCTGA	5260	TGAATGGGAG	5270	CAGTGGTGA	5280	ATGCCCTTAA	5290	TGAGGAAAC	5300	CTGTTTGGCT	5310	CAGAAGAAAT
	ACATAAATC		TAAGGTGGA		TACCTTGACT		ACTTACCCTC		GTACCCACCT		TACGGAATTT		ACTCCCTTTG		GACAAAACGA		GTCTTCTTTA
5320	GCCATCTAGT	5330	GATGATGAGG	5340	CTACTGCTGA	5350	CTCTCAACAT	5360	TCTACTCCTC	5370	CAAAAAGAA	5380	GAGAAAGTA	5390	GAAGACCCCA	5400	AGGACTTTCC
	CGGTAGATCA		CTACTACTCC		GATGACGACT		GAGAGTTGTA		AGATGAGGAG		GTTTTTTCTT		CTCTTTTCCAT		CTTCTGGGGT		TCCTGAAAGG

ON0146A NP

18/53

FIG. 14G

Primary Sequence = SEQ ID NO:10
 Complementary Sequence = SEQ ID NO:28

pD17-cJ-dCH2.H1

5410	5420	5430	5440	5450	5460	5470	5480	5490
TTCCAGATTTG	CTAAGTTTTT	TGAGTCATGC	TGTGTTTAGT	AATAGAACTC	TTGCTTGCTT	TGCTATTTAC	ACCACAARGG	AAAAAGCTGC
AAGTCTTAAC	GATTCAAAA	ACTCAGTACG	ACACAAATCA	TTATCTTGAG	AACGAACGAA	ACGATAAATG	TGGTGTTC	TTTTTCGACG
5500	5510	5520	5530	5540	5550	5560	5570	5580
ACTGCTATAC	AAGAAAATTA	TGGAAAATA	TTCTGTAAAC	TTTATAAGTA	GGCATAACAG	TTATAATCAT	AACATACTGT	TTTTTCTTAC
TGACGATATG	TTCTTTTAAT	ACCTTTTAT	AAGACATTGG	AAATATTCAAT	CCGTATTGTC	AAATATTAGTA	TTGTATGACA	AAAAAGANTG
5590	5600	5610	5620	5630	5640	5650	5660	5670
TCCACACAGG	CATAGAGTGT	CTGCTATTAA	TAACTATGCT	CAAAAATTGT	GTACCTTTAG	CTTTTAAAT	TGTAAAGGGG	TTAATAAGGA
AGGTGTGTCC	GTATCTCACA	GACGATAAAT	ATTGATACGA	GTTTTTAAACA	CATGGAATC	GAAAAATTAA	ACATTTCCCC	AATTATTCCT
5680	5690	5700	5710	5720	5730	5740	5750	5760
ATATTGTATG	TATAGTGCCT	TGACTAGAGA	TCATAATCAG	CCATACCACA	TTTGTAGAGG	TTTTACTTGC	TTTAAAAAAC	CTCCCACACC
TATAAACTAC	ATATCAGGGA	ACTGATCTCT	AGTATTAGTC	GGTATGGTGT	AAACATCTCC	AAAATGAACG	AAATTTTTTG	GAGGGTGTGG
5770	5780	5790	5800	5810	5820	5830	5840	5850
TCCCCCTGAA	CCTGAARCAT	AAATGAATG	CAATTGTGT	TGTTAACTTG	TTTATTGCAG	CTTATAATGG	TTACAATAAA	AGCAATAGCA
AGGGGACTT	GGACTTTGTA	TTTTACTTAC	GTTAAACACA	ACAATTGAAC	AAATAACGTC	GAATATTACC	AATGTTTTATT	TCGTTATCGT
5860	5870	5880	5890	5900	5910	5920	5930	5940
TCACAAATTT	CACAAATAAA	GCAATTTTTT	CACATGCATTC	TAGTTGTGGT	TTGTCCAAAC	TCATCAATGT	ATCTTATCAT	GTCTGGATCG
AGTGTTTAAA	GTGTTTATTT	CGTAAAAAAA	GTGACGTAAAG	ATCAACACCA	AACAGGTTTG	AGTAGTTACA	TAGAATAGTA	CAGACCTAGC
5950	5960	5970	5980	5990	6000	6010	6020	6030
GCTGGATGAT	CCGCCAGGCG	GGGGATCTCA	TGCTGGAGTT	CTTCGCCCC	CCCAACTTGT	TTATTGCAGC	TTATAATGGT	TACAAATAAA
CGACCTACTA	GGAGGTCGCG	CCCCCTAGAGT	ACGACCTCAA	GAGCGGGGTG	GGGTGAACA	AAATAACGTCG	AAATATTACCA	ATGTTTATTT
6040	6050	6060	6070	6080	6090	6100	6110	6120
GCAATAGCAT	CACAAATTTT	ACAAATAAAG	CATTTTTTTC	ACTGCATCTT	AGTTGTGGTT	TGTCCAAACT	CATCAATGTA	TCTTATCATG
CGTTATCGTA	GTGTTTAAAG	TGTTTATTTT	GTAATAAAAG	TGACGTAAAG	TCAACACCAA	ACAGGTTTGA	GTAGTTACAT	AGAATAGTAC
6130	6140	6150	6160	6170	6180	6190	6200	6210
TCTGTATACC	GTGACCTCT	AGCTAGAGCT	TGGCGTAATC	ATGGTCATAG	CTGTTTCCCTG	TGTGAATAATG	TTATCCGCTC	ACAATTCAC
AGACATATGG	CAGCTGGAGA	TCGATCTCGA	ACCGCATTAG	TACCAGTATC	GACAAAGGAC	ACACTTTAAC	AATAGGCGAG	TGTTAAGGTG
6220	6230	6240	6250	6260	6270	6280	6290	6300
ACACATACG	AGCCGGAAGC	ATAAAGTGTA	AAGCCTGGGG	TGCCCTAATGA	GTGAGCTAAC	TCACATTAAT	TGGGTTGGCG	TCACTGCCCG
TGTTGTATGC	TCGGCCTTCG	TATTTACAT	TTCCGACCCC	ACGGATTACT	CACCTCGATTG	AGTGTAATTA	ACGCAACGCG	AGTGACGGGC

ON0146A NP

19/53

FIG. 14H

Primary Sequence = SEQ ID NO:10
 Complementary Sequence = SEQ ID NO:28

pD17-cJ-dCH2.H1

6310	6320	6330	6340	6350	6360	6370	6380	6390
CTTTCCAGTC	GGGAACCTG	TCGTGCCAGC	TGCAATTAATG	AATCGGCCAA	CGCGGGGGA	GAGCGGTTT	GCGTATTGGG	CGCTCTTCCG
GAAGGTCTAG	CCCTTTGGAC	AGCACGGTCG	ACGTAATTAC	TTAGCCGGTT	GCGCGCCCT	CTCCGCCAA	CGCATAACCC	CGGAGAACGC
6400	6410	6420	6430	6440	6450	6460	6470	6480
CTTCCTCGCT	CACAGACTCG	CTGGGCTCGG	TCGTTCCGGT	GCGGCGAGCG	GTATCAGCTC	ACTCAAGGC	GGTAATACGG	TTATCCACAG
GAAGGAGCGA	GTGACTGAGC	GACGCGAGCC	AGCAAGCCGA	CGCCGCTCGC	CATAGTCGAG	TGAGTTTCCG	CCATTATGCC	AATAGGTGTC
6490	6500	6510	6520	6530	6540	6550	6560	6570
AATCAGGGGA	TAACGCAGGA	AGAACAATGT	GAGCAAAAGG	CCAGCAAAAG	GCCAGGACCC	GTRAAAAGGC	CGCGTTGCTG	GCGTTTTTCC
TTAGTCCCCCT	ATTGCGTCCT	TTCTTGATACA	CTCGTTTTC	GGTCGTTTTC	CGGTCCCTGG	CATTTTTCG	GCGCAACGAC	CGCAAAAAGG
6580	6590	6600	6610	6620	6630	6640	6650	6660
ATAGGCTCCG	CCCCCTGAC	GAGCATCACA	AAATCGACG	CTCAAGTCAG	AGGTGGCGAA	ACCCGACAGG	ACTATAAAGA	TACCAGGCGT
TATCCGAGGC	GGGGGACTG	CTCGTAGTGT	TTTTAGCTGC	GAGTTCAGTC	TCCACCGCTT	TGGGCTGTCC	TGNTATTTCT	ATGCTCCGCA
6670	6680	6690	6700	6710	6720	6730	6740	6750
TTCCCCCTGG	ANGCTCCCTC	GTGCGCTCTC	CTGTTCCGAC	CCTGCCGCTT	ACCGGATACC	TGTCCGCCCT	TCTCCCTTCG	GGAAGCGTGG
ANGGGGACC	TTGAGGGGAG	CACGCGAGAG	GACAGGCTG	GGACGGCGAA	TGGCTATGG	ACAGGCGGAA	AGAGGGAAAGC	CCTTCGCACC
6760	6770	6780	6790	6800	6810	6820	6830	6840
CGCTTCTCA	ATGCTCACGC	TGTAGGTATC	TCAGTTCCGT	GTAGGTCCGT	CGCTCCAAAGC	TGGGCTGTGT	GCACGAACCC	CCCGTTCAGC
GCGAAGAGT	TACGAGTGGC	ACATCCATAG	AGTCAGGCCA	CATCCAGCAA	GCGAGGTTCG	ACCCGACACA	CGTGCTTGGG	GGGCAAGTCG
6850	6860	6870	6880	6890	6900	6910	6920	6930
CCGACCGCTG	CGCCTTATCC	GGTACTATC	GTCTTGAGTC	CAACCCGGTA	AGACACGACT	TATCGCCACT	GGCAGCAGCC	ACTGGTAACA
GGCTGGCGAC	GCGGAATAGG	CCATTGATAG	CAGAACTCAG	GTGCGGCCAT	TCTGTGCTGA	ATAGCGGTGA	CCGTCTCTCG	TGACCATTTT
6940	6950	6960	6970	6980	6990	7000	7010	7020
GGAATTAGCAG	AGCGAGGTAT	GTAGCGGGTG	CTACAGAGTT	CTTGAAGTGG	TGGCCCTAAT	ACGGCTACAC	TAGAAGGACA	GTATTTGGTA
CCTAATCGTC	TCGCTCCATA	CATCCGCCAC	GATGCTCTCA	GAACTTCACC	ACCGGATTGA	TGCCGATGTG	ATCTTCTCTG	CATAAACCAT
7030	7040	7050	7060	7070	7080	7090	7100	7110
TCGCGCTCT	GCTGAAGCCA	GTTACCTTCG	GAAAGAGAGT	TGGTAGCTCT	TGNTCCGGCA	AACAAACCA	CGCTGGTAGC	GGTGGTTTTT
AGACGCGAGA	CGACTTCGGT	CAATGGAGC	CTTTTCTCA	ACCATCGAGA	ACTAGGCCGT	TTGTTTGGTG	GCGACCATCG	CCACCAAAA
7120	7130	7140	7150	7160	7170	7180	7190	7200
TTGTTTGCAA	GCAGCAGATT	ACGCGCAGAA	AAAAGGATC	TCAAGAAGAT	CCTTTGATCT	TTTCTACGGG	GTCTGACGCT	CAGTGAACG
ARCAACGGTT	CGTCGTCTAA	TGCGCGTCTT	TTTTTCTTAG	AGTTCCTTA	GGAACACTAGA	AAAGATGCC	CAGACTGCCA	GTCACCTTGC

ON0146A NP

20/53

FIG. 14I

Primary Sequence = SEQ ID NO:10
 Complementary Sequence = SEQ ID NO:28

pD17-cJ-dCH2.H1

7210	7220	7230	7240	7250	7260	7270	7280	7290
AAACTCAG	TTAAGGGATT	TTGGTCATGA	GATTATCAAA	AAGGATCTTC	ACCTAGATCC	TTTTAAATTA	AAATGAAGT	TTTAATCAA
TTTTGAGTGC	AATCCCTAA	AACCAGTACT	CTAATAGTTT	TTCTCAGAAG	TGGATCTAGG	AAATTTAAT	TTTTACTTCA	AAATTAGTT
7300	7310	7320	7330	7340	7350	7360	7370	7380
TCTAAAGTAT	ATATGAGTAA	ACTTGGTCTG	ACAGTTACCA	ATGCTTAATC	AGTGAGGCAC	CTATCTCAGC	GATCTGTCTA	TTTCGTTTCAT
AGATTTTCATA	TATACTCATT	TGAACCAAGC	TGTCATAGGT	TACGAATTAG	TCACTCCGTG	GATAGAGTCC	CTAGACAGAT	AAAGCAAGTA
7390	7400	7410	7420	7430	7440	7450	7460	7470
CCATAGTTGC	CTGACTCCCC	GTCTGTGTAGA	TAACTACGAT	ACGGGAGGGC	TTACCATCTG	GCCCCAGTGC	TGCAATGATA	CCGCGAGAGCC
GGTATCAACG	GACTGAGGGG	CAGCACATCT	ATTGATGCTA	TGCCCTCCCG	AATGGTAGAC	CGGGGTCAAG	ACGTTACTAT	GGCGCTCTGG
7480	7490	7500	7510	7520	7530	7540	7550	7560
CACGCTCACC	GGCTCCAGAT	TTATCAGCAA	TAAACCAAGC	AGCCGGAAGG	GCCGAGCGCA	GAAGTGGTCC	TGCAACTTTA	TCCGCCCTCCA
GTGCGAGTGG	CCGAGGTCTA	AATAGTCGTT	ATTGCTCGG	TCCGCCCTCC	CGGCTCGCGT	CTTCACCAGG	ACGTTGAAAT	AGGCGGAGGT
7570	7580	7590	7600	7610	7620	7630	7640	7650
TCCAGTCTAT	TAAATGTTGC	CGGGAAGCTA	GAGTAAGTAG	TTCCGCCAGT	AATAGTTTGC	GCAACGTTGT	TGCCATGTCT	ACAGGCATCG
AGGTCAGATA	ATTAAACACG	GCCCCCTCGAT	CTCATTCATC	AAGCGGTCAA	TTATCAAAACG	CGTTGCAACA	ACGGTAACGA	TGTCGGTAGC
7660	7670	7680	7690	7700	7710	7720	7730	7740
TGGTGTACG	CTCGTCTGTT	GGTATGGCTT	CATTACAGTC	CGGTTCCCAA	CGATCAAGGC	GAGTTACATG	ATCCCCCATG	TTGTGCAAAA
ACCACAGTGC	GAGCAGCAAA	CCATACCGAA	GTAAGTCCAG	GCCAAAGGTT	GCTAGTTCCG	CTCAATGTAC	TAGGGGGTAC	AACACGTTTTT
7750	7760	7770	7780	7790	7800	7810	7820	7830
AAGCGGTTAG	CTCCTTCGGT	CCTCGGATCG	TTGTCAAGAG	TAAAGTTGGC	GCAAGTTTAT	CACTCATGGT	TATGGCAGCA	CTGCATAATT
TTCCGCCAATC	GAGGAAGCCA	GGAGGCTAGC	AACAGTCTTC	ATTCAACCGG	CGTCACAATA	GTGAGTACCA	ATACCGTCTG	GACGTATTAA
7840	7850	7860	7870	7880	7890	7900	7910	7920
CTCTTACTGT	CATGCCATCC	GTAAGATGCT	TTTCTGTGAC	TGGTGAGTAC	TCAACCAAGT	CATTCTGAGA	ATAGTGTATG	CGGCGACCGA
GAGANTGACA	GTACGGTAGG	CATTCTACGA	AAAGACACTG	ACCACTCATG	AGTTGGTTCA	GTAAGACTCT	TATCACATAC	GCCGCTGGCT
7930	7940	7950	7960	7970	7980	7990	8000	8010
GTTGCTCTTG	CCCGCGGTCA	ATACGGGATA	ATACCGGCC	ACATAGCAGA	ACTTTAAAG	TGCTCATCAT	TGGAAAACGT	TCCTCGGGGC
CNACGAGAAC	GGGCGGCAGT	TATGCCCTAT	TATGGCGCGG	TGTATCGTCT	TGAAATTTTC	ACGAGTAGTA	ACCTTTTGCA	AGNAGCCCCG
8020	8030	8040	8050	8060	8070	8080	8090	8100
GAAACTCTC	AAGGATCTTA	CCGCTGTTGA	GATCCAGTTC	GATGTAACCC	ACTCGTGCAC	CCCACTGATC	TTCAGCATCT	TTTACTTTCA
CTTTTGAGAG	TTCCCTAGANT	GGCGACAACT	CTAGGTCAAG	CTACATTGGG	TGAGCACCGT	GGTTGACTAG	NAGTCGTAGA	AAATGAAGT

21/53

FIG. 14J

Primary Sequence = SEQ ID NO:10

Complementary Sequence = SEQ ID NO:28

PD17-cJ-dCH2.H1

8110	8120	8130	8140	8150	8160	8170	8180	8190
CCAGCGTTTC	TGGGTGAGCA	AAAACAGGAA	GGCAAAATGC	CGCAAAAAG	GGAATARGGG	CGACACGGAA	ATGTTGAATA	CTCATACTCT
GGTCGCAAG	ACCCACTCGT	TTTGTCCCTT	CCGTTTACG	CGGTTTTTC	CCTTATTCCC	GCTGTGCCCT	TACAACTTAT	GAGTATGAGA
8200	8210	8220	8230	8240	8250	8260	8270	8280
TCCTTTTTCA	ATATTATTGA	AGCATTATC	AGGGTTATTG	TCTCATGAGC	GGATACATAT	TTGAATGTAT	TTAGAAAAAT	AAACAAATAG
AGGAAAAAGT	TATAATAACT	TCGTAAATAG	TCCCAATAAC	AGAGTACTCG	CCTATGTATA	AACTTACATA	AATCTTTTAA	TTTGTTTATC
8290	8300	8310	8320	8330				
GGGTTCCGCG	CACATTTC	CGAAAAAGTGC	CACCTGACGT	C				
CCCAAGGCGC	GTGTAAGGG	GCTTTTCACG	GTGGACTGCA	G				

ON0146A NP

22/53

FIG. 15

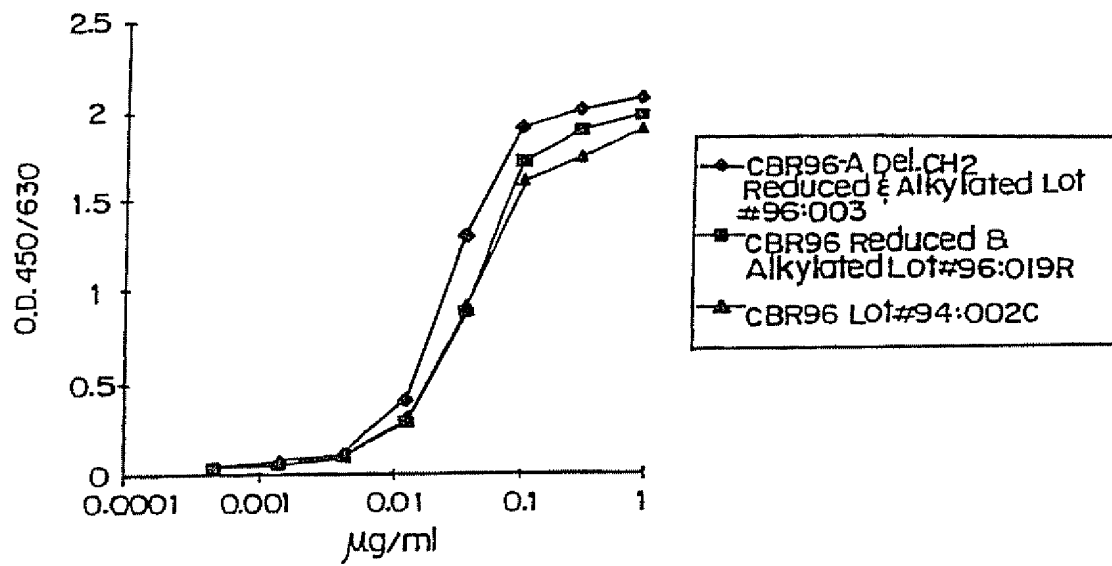
COMPARISON OF WHOLE chIBR96 AND
DELETED CH2 chIBR96 ON Ley/K ELISA

FIG. 16

hBR96-2B:L235 to A235 and G237 to A237

hBR96-2C:E318 to S318, K320 to S320, and K322 to S322

hBR96-2D:P331 to A331

hBR96-2E:L235 to A235, G237 to A237, E318 to S318, K320 to S320,
and K322 to S322

hBR96-2F:L235 to A235, G237 to A237, and P331 to A331

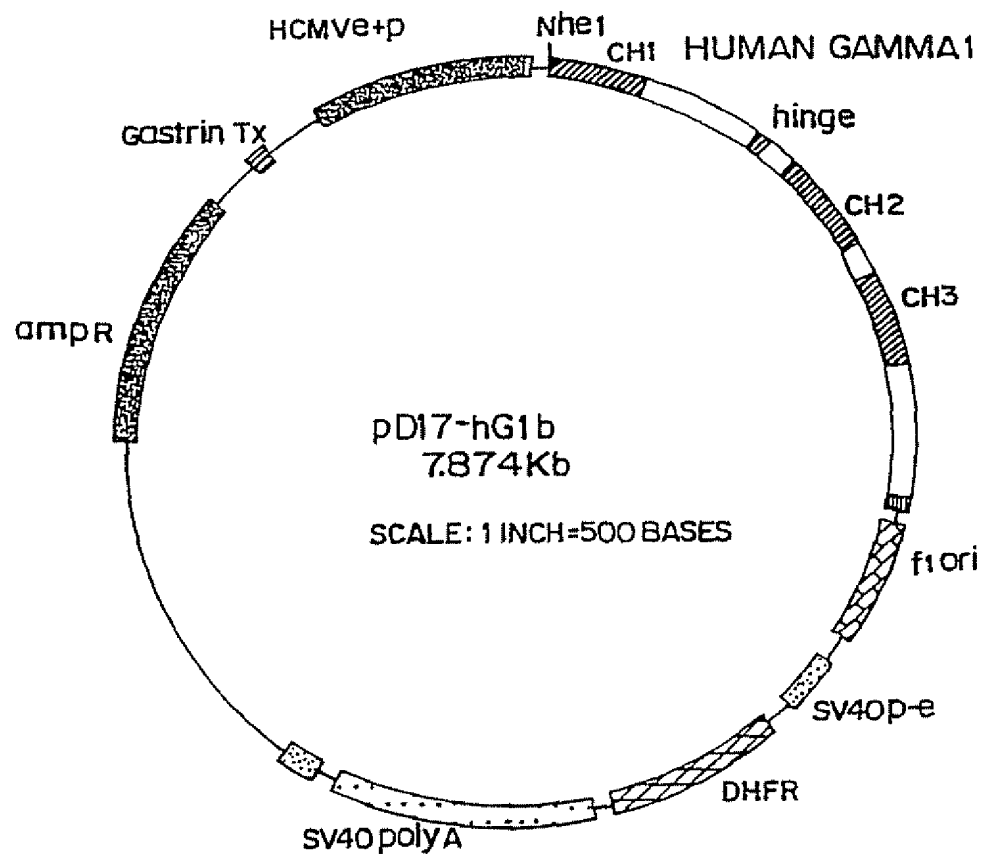
hBR96-2G:E318 to S318, K320 to S320, K322 to S322, and P331 to
A331

hBR96-2H: L235 to A235, G237 to A237, E318 to S318, K320 to S320,
K322 to S322, and P331 to A331

ON0146A NP

24/53

FIG. 17



25/53

FIG. 18A

(SEQ ID NO:22)

1	GGTACCAATT	TAAATTGATA	TCTCCTTAGG	TCTCGAGTCT	CTAGATAACC
51	GGTCAATCGA	TTGGAATTCT	TGCGGCCCGCT	TGCTAGCCAC	CATGGAGTTG
101	TGGTTAAGCT	TGGTCTTCCT	TGTCCTTGTT	TTAAAAGGTG	TCCAGTGTGA
151	AGTGCAACTG	GTGGAGTCTG	GGGGAGGCTT	AGTGCAGCCT	GGAGGGTCCC
201	TGCGACTTTC	CTGTGCTGCA	TCTGGATTCC	CGTTCAGTGA	CTATTACATG
251	TATTGGGTTT	GCCAGGCTCC	AGGCAAGGGA	CTGGAGTGGG	TCTCATACAT
301	TAGTCAAGAT	GGTGATATAA	CCGACTATGC	AGACTCCGTA	AAGGGTCGAT
351	TCACCATCTC	CAGAGACAAT	GCAAAGAACA	GCCTGTACCT	GCAAATGAAC
401	AGCCTGAGGG	ACGAGGACAC	AGCCGTGTAT	TACTGTGCAA	GAGGCCTGGC
451	GGACGGGGCC	TGGTTTGCTT	ACTGGGGCCA	AGGGACTCTG	GTCACGGTCT
501	CTTCCGCTAG	CACCAAGGGC	CCATCGGTCT	TCCCCCTGGC	ACCCTCCTCC
551	AAGAGCACCT	CTGGGGGCAC	AGCGGCCCTG	GGCTGCCTGG	TCAAGGACTA
601	CTTCCCCGAA	CCGGTGACGG	TGTCGTGGAA	CTCAGGCGCC	CTGACCAGCG
651	GCGTGACAC	CTTCCCGGCT	GTCTTACAGT	CCTCAGGACT	CTACTCCCTC
701	AGCAGCGTGG	TCACCGTGCC	CTCCAGCAGC	TTGGGCACCC	AGACCTACAT
751	CTGCAACGTG	AATCACAAGC	CCAGCAACAC	CAAGGTGGAC	AAGAAAGTTG
801	GTGAGAGGCC	AGCACAGGGA	GGGAGGGTGT	CTGCTGGAAG	CCAGGCTCAG
851	CGCTCCTGCC	TGGACGCATC	CCGGCTATGC	AGCCCCAGTC	CAGGGCAGCA
901	AGGCAGGCCC	CGTCTGCCTC	TTCACCCGGA	GGCCTCTGCC	CGCCCCACTC
951	ATGCTCAGGG	AGAGGGTCTT	CTGGCTTTTT	CCCCAGGCTC	TGGGCAGGCA
1001	CAGGCTAGGT	GCCCCTAACC	CAGGCCCTGC	ACACAAAGGG	GCAGGTGCTG
1051	GGCTCAGACC	TGCCAAGAGC	CATATCCGGG	AGGACCCCTG	CCCTGACCTA
1101	AGCCCACCCC	AAAGGCCAAA	CTCTCCACTC	CCTCAGCTCG	GACACCTTCT
1151	CTCCTCCGAG	ATTCCAGTAA	CTCCCAATCT	TCTCTCTGCA	GAGCCCAAAT
1201	CTTGTGACAA	AACTCACACA	TGCCCACCGT	GCCCAGGTAA	GCCAGCCGAG
1251	GCCTCGCCCT	CCAGCTCAAG	GCGGGACAGG	TGCCCTAGAG	TAGCCTGCAT
1301	CCAGGGACAG	GCCCCAGCCG	GGTGCTGACA	CGTCCACCTC	CATCTCTTCC

ON0146A NP

26/53

FIG. 18B

(SEQ ID NO:22)

		235	237		
1351	TCAGCACCTG	AACTCCTGGG	GGGACCGTCA	GTCTTCCTCT	TCCCCC AAA
1401	ACCCAAGGAC	ACCCTCATGA	TCTCCCGGAC	CCCTGAGGTC	ACATGCGTGG
1451	TGGTGGACGT	GAGCCACGAA	GACCCTGAGG	TCAAGTTCAA	CTGGTACGTG
1501	GACGGCGTGG	AGGTGCATAA	TGCCAAGACA	AAGCCGCGGG	AGGAGCAGTA
1551	CAACAGCACG	TACCGTGTGG	TCAGCGTCCT	CACCGTCCTG	CACCAGGACT
		318	320	322	
1601	GGCTGAATGG	CAAGGAGTAC	AAGTGCAAGG	TCTCCAACAA	AGCCCTCCCA
	331				
1651	GCCCCCATCG	AGAAAACCAT	CTCCAAAGCC	AAAGGTGGGA	CCCGTGGGGT
1701	GCGAGGGCCA	CATGGACAGA	GGCCGGCTCG	GCCCACCCTC	TGCCCTGAGA
1751	GTGACCGCTG	TACCAACCTC	TGTCCCTACA	GGGCAGCCCC	GAGAACCACA
1801	GGTGATACAC	CTGCCCCCAT	CCCGGGATGA	GCTGACCAAG	AACCAGGTCA
1851	GCCTGACCTG	CCTGGTCAAA	GGCTTCTATC	CCAGCGACAT	CGCCGTGGAG
1901	TGGGAGAGCA	ATGGGCAGCC	GGAGAACAAC	TACAAGACCA	CGCCTCCCGT
1951	GCTGGACTCC	GACGGCTCCT	TCTTCCTCTA	CAGCAAGCTC	ACCGTGGACA
2001	AGAGCAGGTG	GCAGCAGGGG	AACGTCTTCT	CATGCTCCGT	GATGCATGAG
2051	GCTCTGCACA	ACCACTACAC	GCAGAAGAGC	CTCTCCCTGT	CTCCGGGTAA
2101	ATGAGTGCEA	CGGCCGGCAA	GCCCCGCTC	CCCGGGCTCT	CGCGGTGCGA
2151	CGAGGATGCT	TGGCACGTAC	CCCCTGTACA	TACTTCCCGG	GCGCCCAGCA
2201	TGGAAATAAA	GCACCCAGCG	CTGCCCTGGG	CCCCTGCGAG	ACTGTGATGG
2251	TTCTTTCCAC	GGGTCAGGCC	GAGTCTGAGG	CCTGAGTGGC	ATGAGGGAGG
2301	CAGAGCGGGT	CCCCTGTGCC	CCACACTGGC	CCAGGCTGTG	CAGGTGTGCC
2351	TGGGCCCCCT	AGGGTGGGGC	TCAGCCAGGG	GCTGCCCTCG	GCAGGGTGGG
2401	GGATTTGCCA	GCGTGGCCCT	CCCTCCAGCA	GCACCTGCCC	TGGGCTGGGC
2451	CACGGGAAGC	CCTAGGAGCC	CCTGGGGACA	GACACACAGC	CCCTGCCTCT
2501	GTAGGAGACT	GTCCTGTTCT	GTGAGCGCCC	CTGTCCTCCC	GACCTCCATG
2551	CCCCTCGGG	GGCATGCCTA	GTCCATGTGC	GTAGGGACAG	GCCCTCCCTC
2601	ACCCATCTAC	CCCCACGGCA	CTAACCCCTG	GCTGCCCTGC	CCAGCCTCGC
2651	ACCCGCATGG	GGACACAACC	GACTCCGGGG	ACATGCACTC	TCGGGCCCTG
2701	TGGAGGGACT	GGTGCAGATG	CCCACACACA	CACTCAGCCC	AGACCCGTTC
2751	AACAAACCCC	GCACTGAGGT	TGGCCGGCCA	CACGGCCACC	ACACACACAC
2801	GTGCACGCCT	CACACACGGA	GCCTCACCCG	GGCGAACTGC	ACAGCACCCA

27/53

FIG. 18C

(SEQ ID NO:22)

2851	GACCAGAGCA	AGGTCTCTGC	ACACGTGAAC	ACTCCTCGGA	CACAGGCCCC
2901	CACGAGCCCC	ACGCGGCACC	TCAAGGCCCA	CGAGCCTCTC	GGCAGCTTCT
2951	CCACATGCTG	ACCTGCTCAG	ACAAACCCAG	CCCTCCTCTC	ACAAGGGTGC
3001	CCCTGCAGCC	GCCACACACA	CACAGGGGAT	CACACACCAC	GTCACGTCCC
3051	TGGCCCTGGC	CCACTTCCCA	GTGCCGCCCT	TCCCTGCAGG	ACGGATCAGC
3101	CTCGACTGTG	CCTTCTAGTT	GCCAGCCATC	TGTTGTTTGC	CCCTCCCCCG
3151	TGCCTTCCTT	GACCTTGGA	GGTGCCACTC	CCACTGTCCT	TTCTTAATAA
3201	AATGAGGAAA	TTGCATCGCA	TTGTCTGAGT	AGGTGTCATT	CTATTCTGGG
3251	GGGTGGGGTG	GGGCAGGACA	GCAAGGGGGA	GGATTGGGAA	GACAATAGCA
3301	GGCATGCTGG	GGATGCGGTG	GGCTCTATGG	CTTCTGAGGC	GGAAAGAACC
3351	AGCTGGGGCT	CTAGGGGGTA	TCCCCACGCG	CCCTGTAGCG	GCGCATTAA
3401	CGCGGCGGGT	GTGGTGGTTA	CGCGCAGCGT	GACCGCTACA	CTTGCCAGCG
3451	CCCTAGCGCC	CGCTCCTTTC	GCTTCTTCC	CTTCCITTCT	CGCCACGTTT
3501	GCCGGGCCTC	TCAAAAAGG	GAAAAAAGC	ATGCATCTCA	ATTAGTCAGC
3551	AACCATAGTC	CCGCCCCTAA	CTCCGCCCAT	CCCGCCCCTA	ACTCCGCCCA
3601	GTTCGGCCCA	TTCTCCGCC	CATGGCTGAC	TAATTTTTTT	TATTTATGCA
3651	GAGGCCGAGG	CCGCCTCGGC	CTCTGAGCTA	TTCCAGAAGT	AGTGAGGAGG
3701	CTTTTTTGGA	GGCCTAGGCT	TTTGCAAAAA	GCTTGGACAG	CTCAGGGCTG
3751	CGATTTCGCG	CCAAACTTGA	CGGCAATCCT	AGCGTGAAGG	CTGGTAGGAT
3801	TTTATCCCCG	CTGCCATCAT	GGTTCGACCA	TTGAACTGCA	TGGTCGCCGT
3851	GTCCCAAAT	ATGGGGATTG	GCAAGAACGG	AGACCTACCC	TGGCCTCCGC
3901	TCAGGAACGA	GTTCAAGTAC	TTCCAAAGAA	TGACCACAAC	CTCTTCAGTG
3951	GAAGGTAAAC	AGAATCTGGT	GATTATGGGT	AGGAAAACCT	GGTTCTCCAT
4001	TCCTGAGAAG	AATCGACCTT	TAAAGGACAG	AATTAATATA	GTTCTCAGTA
4051	GAGAACTCAA	AGAACCACCA	CGAGGAGCTC	ATTTTCTTGC	CAAAAGTTTG
4101	GATGATGCCT	TAAGACTTAT	TGAACAACCG	GAATTGGCAA	GTAAAGTAGA
4151	CATGGTTTGG	ATAGTCGGAG	GCAGTTCTGT	TTACCAGGAA	GCCATGAATC
4201	AACCAGGCCA	CCTTAGACTC	TTGTGACAA	GGATCATGCA	GGAATTTGAA
4251	AGTGACACGT	TTTTCCAGA	AATTGATTTG	GGGAAATATA	AACTTCTCCC
4301	AGAATACCCA	GGCGTCCTCT	CTGAGGTCCA	GGAGGAAAAA	GGCATCAAGT

ON0146A NP

28/53

FIG. 18D

(SEQ ID NO:22)

4351	ATAAGTTTGA	AGTCTACGAG	AAGAAAGACT	AACAGGAAGA	TGCTTTCAAG
4401	TTCTCTGCTC	CCCTCCTAAA	GCTATGCATT	TTTATAAGAC	CATGGGACTT
4451	TTGCTGGCTT	TAGATCTCTT	TGTGAAGGAA	CCTTACTTCT	GTGGTGTGAC
4501	ATAATTGGAC	AAACTACCTA	CAGAGATTTA	AAGCTCTAAG	GTAAATATAA
4551	AATTTTAAAG	TGTATAATGT	GTTAAACTAC	TGATTCTAAT	TGTTTGTGTA
4601	TTTtagattc	CAACCTATGG	AACtGATGAA	TGGGAGCAGT	GGTGGaATGC
4651	CTTTAATGAG	GAAAACCTGT	TTTGCTCAGA	AGAAATGCCA	TCTAGTGATG
4701	ATGAGGCTAC	TGCTGACTCT	CAACATTCTA	CTCCTCCAAA	AAAGAAGAGA
4751	AAGGTAGAAG	ACCCCAAGGA	CTTTCCTTCA	GAATTGCTAA	GTTTTTTGAG
4801	TCATGCTGTG	TTTAGTAATA	GAACTCTTGC	TTGCTTTGCT	ATTTACACCA
4851	CAAAGGAAAA	AGCTGCACTG	CTATACAAGA	AAATTATGGA	AAAATATTCT
4901	GTAACCTTTA	TAAGTAGGCA	TAACAGTTAT	AATCATAACA	TACTGTTTTT
4951	TCTTACTCCA	CACAGGCATA	GAGTGTCTGC	TATTAATAAC	TATGCTCAAA
5001	AATTGTGTAC	CTTTAGCTTT	TTAATTTGTA	AAGGGGTTAA	TAAGGAATAT
5051	TTGATGTATA	GTGCCTTGAC	TAGAGATCAT	AATCAGCCAT	ACCACATTTG
5101	TAGAGGTTTT	ACTTGCTTTA	AAAAACCTCC	CACACCTCCC	CCTGAACCTG
5151	AAACATAAAA	TGAATGCAAT	TGTTGTTGTT	AACTTGTTTA	TTGCAGCTTA
5201	TAATGGTTAC	AAATAAAGCA	ATAGCATCAC	AAATTTCAAC	AATAAAGCAT
5251	TTTTTTCACT	GCATTCTAGT	TGTGGTTTGT	CCAAACTCAT	CAATGTATCT
5301	TATCATGTCT	GGATCGGCTG	GATGATCCTC	CAGCGCGGGG	ATCTCATGCT
5351	GGAGTTCTTC	GCCCACCCCA	ACTTGTTTAT	TGCAGCTTAT	AATGGTTACA
5401	AATAAAGCAA	TAGCATCACA	AATTTCACAA	ATAAAGCATT	TTTTTCACTG
5451	CATTCTAGTT	GTGGTTTGTC	CAAACtCATC	AATGTATCTT	ATCATGTCTG
5501	TATACCGTCG	ACCTCTAGCT	AGAGCTTGGC	GTAATCATGG	TCATAGCTGT
5551	TTCCtGTGTG	AAATTGTTAT	CCGCTCACAA	TTCCACACAA	CATACGAGCC
5601	GGAAGCATAA	AGTGTAAGC	CTGGGGTGCC	TAATGAGTGA	GCTAACTCAC
5651	ATTAATTGCG	TTGCGCTCAC	TGCCCCGCTTT	CCAGTCGGGA	AACCTGTCTG
5701	GCCAGCTGCA	TTAATGAATC	GGCCAACGCG	CGGGGAGAGG	CGGTTTGCGT
5751	ATTGGGCGCT	CTTCCGCTTC	CTCGCTCACT	GACTCGCTGC	GCTCGGTCTG
5801	TCGGCTGCGG	CGAGCGGTAT	CAGCTCACTC	AAAGGCGGTA	ATACGGTTAT

ON0146A NP

29/53

FIG. 18E

(SEQ ID NO:22)

5851	CCACAGAATC	AGGGGATAAC	GCAGGAAAGA	ACATGTGAGC	AAAAGGCCAG
5901	CAAAAGGCCA	GGAACCGTAA	AAAGGCCGCG	TTGCTGGCGT	TTTTCCATAG
5951	GCTCCGCCCC	CCTGACGAGC	ATCACAAAAA	TCGACGCTCA	AGTCAGAGGT
6001	GGCGAAACCC	GACAGGACTA	TAAAGATACC	AGGCGTTTCC	CCCTGGAAGC
6051	TCCCTCGTGC	GCTCTCCTGT	TCCGACCCTG	CCGCTTACCG	GATACCTGTC
6101	CGCCTTTTCTC	CCTTCGGGAA	GCGTGGCGCT	TTCTCAATGC	TCACGCTGTA
6151	GGTATCTCAG	TTCCGGTGTAG	GTCGTTGCGT	CCAAGCTGGG	CTGTGTGCAC
6201	GAACCCCCCG	TTCAGCCCCA	CCGCTGCGCC	TTATCCGGTA	ACTATCGTCT
6251	TGAGTCCAAC	CCGGTAAGAC	ACGACTTATC	GCCACTGGCA	GCAGCCACTG
6301	GTAACAGGAT	TAGCAGAGCG	AGGTATGTAG	GCGGTGCTAC	AGAGTTCTTG
6351	AAGTGGTGGC	CTAACTACGG	CTACACTAGA	AGGACAGTAT	TTGGTATCTG
6401	CGCTCTGCTG	AAGCCAGTTA	CCITCGGAAA	AAGAGTTGGT	AGCTCTTGAT
6451	CCGGCAAACA	AACCACCGCT	GGTAGCGGTG	GTTTTTTTGT	TTGCAAGCAG
6501	CAGATTACGC	GCAGAAAAAA	AGGATCTCAA	GAAGATCCTT	TGATCTTTTC
6551	TACGGGGTCT	GACGCTCAGT	GGAACGAAAA	CTCACGTAA	GGGATTTTGG
6601	TCATGAGATT	ATCAAAAAGG	ATCTTCACCT	AGATCCTTTT	AAATTAAAAA
6651	TGAAGTTTTA	AATCAATCTA	AAGTATATAT	GAGTAAACTT	GGTCTGACAG
6701	TTACCAATGC	TTAATCAGTG	AGGCACCTAT	CTCAGCGATC	TGTCTATTTC
6751	GTTTCATCCAT	AGTTGCCTGA	CTCCCCGTG	TGTAGATAAC	TACGATACGG
6801	GAGGGCTTAC	CATCTGGCCC	CAGTGCTGCA	ATGATACCGC	GAGACCCACG
6851	CTCACCGGCT	CCAGATTTAT	CAGCAATAAA	CCAGCCAGCC	GGAAGGGCCG
6901	AGCGCAGAAG	TGGTCCTGCA	ACTTTATCCG	CCTCCATCCA	GTCTATTAAT
6951	TGTTGCCGGG	AAGCTAGAGT	AAGTAGTTG	CCAGTTAATA	GTTTGCGCAA
7001	CGTTGTTGCC	ATTGCTACAG	GCATCGTGGT	GTCACGCTCG	TCGTTTGGTA
7051	TGGCTTCATT	CAGCTCCGGT	TCCCAACGAT	CAAGGCGAGT	TACATGATCC
7101	CCCATGTTGT	GCAAAAAAGC	GGTTAGCTCC	TTCCGGTCCTC	CGATCGTTGT
7151	CAGAAGTAAG	TTGGCCGCAG	TGTTATCACT	CATGGTTATG	GCAGCACTGC
7201	ATAATTCTCT	TACTGTCATG	CCATCCGTAA	GATGCTTTTC	TGTGACTGGT
7251	GAGTACTCAA	CCAAGTCATT	CTGAGAATAG	TGTATGCCGC	GACCCAGTTG
7301	CTCTTGCCCG	GCGTCAATAC	GGGATAATAC	CGCGCCACAT	AGCAGAACTT

ON0146A NP

30/53

FIG. 18F

(SEQ ID NO:22)

7351	TAAAAGTGCT	CATCATTGGA	AAACGTTCTT	CGGGGCGAAA	ACTCTCAAGG
7401	ATCTTACCGC	TGTTGAGATC	CAGTTCGATG	TAACCCACTC	GTGCACCCAA
7451	CTGATCTTCA	GCATCTTTTA	CTTTCACCCAG	CGTTTCTGGG	TGAGCAAAAA
7501	CAGGAAGGCA	AAATGCCGCA	AAAAAGGGAA	TAAGGGCGAC	ACGGAAATGT
7551	TGAATACTCA	TACTCTTCCT	TTTTCAATAT	TATTGAAGCA	TTTATCAGGG
7601	TTATTGTCTC	ATGAGCGGAT	ACATATTTGA	ATGTATTTAG	AAAAATAAAC
7651	AAATAGGGGT	TCCGCGCACA	TTTCCCCGAA	AAGTGCCACC	TGACGTCGAC
7701	GGATCGGGAG	ATCTGCTAGG	TGACCTGAGG	CGCGCCGGCT	TCGAATAGCC
7751	AGAGTAACCT	TTTTTTTTAA	TTTTATTTTA	TTTTATTTTT	GAGATGGAGT
7801	TTGGCGCCGA	TCTCCCGATC	CCCTATGGTC	GACTCTCAGT	ACAATCTGCT
7851	CTGATGCCGC	ATAGTTAAGC	CAGTATCTGC	TCCCTGCTTG	TGTGTTGGAG
7901	GTCGCTGAGT	AGTGCGCGAG	CAAAATTTAA	GCTACAACAA	GGCAAGGCTT
7951	GACCGACAAT	TGCATGAAGA	ATCTGCTTAG	GGTTAGGCGT	TTTGCCTGCT
8001	TTGCGGATGT	ACGGGCCAGA	TATACGCGTT	GACATTGATT	ATTGACTAGT
8051	TATTAATAGT	AATCAATTAC	GGGGTCATTA	GTTTCATAGC	CATATATGGA
8101	GTTCCGCGTT	ACATAACTTA	CGGTAAATGG	CCCGCCTGGC	TGACCGCCCA
8151	ACGACCCCCG	CCCATTGACG	TCAATAATGA	CGTATGTTCC	CATAGTAACG
8201	CCAATAGGGA	CTTTCATTG	ACGTCAATGG	GTGGACTATT	TACGGTAAAC
8251	TGCCCACTTG	GCAGTACATC	AAGTGTATCA	TATGCCAAGT	ACGCCCCCTA
8301	TTGACGTCAA	TGACGGTAAA	TGSCCCGCCT	GGCATTATGC	CCAGTACATG
8351	ACCTTATGGG	ACTTTCCTAC	TTGGCAGTAC	ATCTACGTAT	TAGTCATCGC
8401	TATTACCATG	GTGATGCGGT	TTTGGCAGTA	CATCAATGGG	CGTGGATAGC
8451	GGTTTGACTC	ACGGGGATTT	CCAAGTCTCC	ACCCATTGA	CGTCAATGGG
8501	AGTTTGTTTT	GGCACCAAAA	TCAACGGGAC	TTTCCAAAAT	GTCGTAACAA
8551	CTCCGCCCCA	TTGACGCAAA	TGGGCGGTAG	GCGTGTACGG	TGGGAGGTCT
8601	ATATAAGCAG	AGCTCTCTGG	CTAACTAGAG	AACCCACTGC	TTACTGGCTT
8651	ATCGAAATTA	ATACGACTCA	CTATAGGGAG	ACCCAAGCTT	

ON0146A NP

31/53

FIG. 19A

Primary Sequence = SEQ ID NO:23
Complementary Sequence = SEQ ID NO:29

		pD17-hG1b									
10	GGTACCAATT	20	TAAATTGATA	30	TCTCCTTAGG	40	TCTCGAGTCT	50	CTAGATAACC	60	GGTCAATCGA
	CCATGGTTAA		ATTAACTAT		AGAGGAATCC		AGAGCTCAGA		GATCTATTGG		CCAGTAGCT
70	TTGGAATTCT	80	TGCGGCCGCT	90	TGCTAGCACC	100	AAGGGCCCAT	110	CGGTCTTCCC	120	CCTGGCACCC
	AACCTTAAGA		ACGCCGCGCA		ACGATCGTGG		TTCCCGGGTA		GCCAGRAGGG		GGACCGTGCG
130	TCCTCCAAAG	140	GCACCTCTGG	150	GGGCACAGCG	160	GCCTTGGGCT	170	GCCTGGTCAA	180	GGACTACTTC
	AGGAGGTTC		CGTGGAGACC		CCCCTGTGCG		CGGGACCCGA		CGGACCAATT		CCTGATGAG
190	CCCGAACCGG	200	TGACGGTGTG	210	GTGGAACTCA	220	GGCGCCCTGA	230	CCAGCGGCGT	240	GCACACCTTC
	GGGCTTGGCC		ACTGCCACAG		CACCTTGAGT		CCGCGGGACT		GGTCGCCCGA		CGTGTGGAAG
250	CCGGCTGTCC	260	TACAGTCTTC	270	AGGACTCTAC	280	TCCCTCAGCA	290	GGTGTGTAC	300	CGTGCCCTCC
	GGCCGACAGG		ATGTCAGGAG		TCTTQAGATG		AGGAGTCTGT		CGCACCAAGT		GCACGGGAGG
310	AGCAGCTTGG	320	GCACCCAGAC	330	CTACATCTGC	340	AACGTQAAATC	350	ACRAGCCGAG	360	CAACACCAAG
	TGTCGNAACC		CGTGGGTCTG		GATGTAGACG		TTGCACTTAG		TGTTCCGGTC		GTGTGTGTTT
370	GTGGACMAG	380	AAGTTGGTGA	390	GAGGCCAGCA	400	CAGGAGGGA	410	GGGTGTCTGC	420	TGGRAGCCAG
	CACCTGTTC		TTCAACCACT		CTCCGGTCTGT		GTCCCTCCCT		CCCACAGACG		ACCTTCGGTC
430	GCTCAGCGCT	440	CCTGCCCTGA	450	CGCATCCCGG	460	CTATGCAGCC	470	CCAGTCCAGG	480	GCAGCAAGGC
	CGAGTCTGGA		GGACGGACCT		GCCTAGGGCC		GATACGTCGG		GGTCAGGTCC		CGTCGTTCGG
490	AGGCCCCGTC	500	TGCCTCTTCA	510	CCCGAGGGCC	520	TCTGCCCGCC	530	CCACTCATGC	540	TCAGGGAGAG
	TCCGGGGCAG		ACGGAGAAAT		GGGCTCTCCG		AGACGGGGCG		GGTQAGTACG		AGTCCCTCTC
550	GGTCTTCTGG	560	CTTTTTCCTC	570	AGGCTCTGGG	580	CAGGCACAGG	590	CTAGGTGCCC	600	CTAACCCAGG
	CCAGAGAGCC		GAATAAGGGG		TCCGAGACCC		GTCCGTGTCC		GATCCACGGG		GATTGGGTCC

ON0146A NP

32/53

FIG. 19B

Primary Sequence = SEQ ID NO:23
 Complementary Sequence = SEQ ID NO:29

pD17-hG1b

610	620	630	640	650	660
CCCTGCACAC	AAAGGGGCAG	GTGCTGGGCT	CAGACCTGCC	AAGAGCCATA	TCCGGGAGGA
GGGACGTGTG	TTTCCCGGTC	CACGACCCGA	GTCTGGACGG	TTCTCGGTAT	AGGCCCTCCT
670	680	690	700	710	720
CCCTGCCCT	GACCTAAGCC	CACCCCAAG	GCCRAACTCT	CCACTCCCTC	AGCTCGGACA
GGGACGGGA	CTGGATTCCG	GTGGGGTTTC	CGGTTTGAGA	GGTGAGGGAG	TCGAGCCTGT
730	740	750	760	770	780
CCTTCTCTCC	TCCCAGATTG	CAGTAACTCC	CAATCTTCTC	TCTGCAGAGC	CCAAATCTTG
GGAAGAGAGG	AGGCTCTAAG	GTCATTGAGG	GTTAGAAGAG	AGACGTCTCG	GGTTTAGAAC
790	800	810	820	830	840
TGACAAACT	CACACATGCC	CACCGTGCCC	AGGTAAGCCA	GCCCAGGCCCT	CGCCCTCCAG
ACTGTTTGA	GTGTGTACGG	GTGGCACGGG	TCCATTCCGT	CGGGTCCGGA	GGGGGAGGTC
850	860	870	880	890	900
CTCAGGCGG	GACAGGTGCC	CTAGAGTAGC	CTGCATCCAG	GGACAGGCC	CAGCCGGGTG
GAGTTCCGCC	CTGTCCACGG	GATCTCATCG	GACGTAGGTC	CCTGTCCGGG	GTGCGGCCAC
910	920	930	940	950	960
CTGACACGTC	CACCTCCATC	TCCTTCCTCAG	CACCTGAAC	CCTGGGGGA	CCGTCACTCT
GACTGTGCAG	GTGGAGGTAG	AGAAGGAGTC	GTGGACTTGA	GGACCCCCCT	GGCAGTCAGA
970	980	990	1000	1010	1020
TCCTCTTCCC	CCCAAAACCC	AAGGACACCC	TCATGATCTC	CCGGACCCCT	GAGGTCACAT
AGGAGAAGGG	GGGTTTGGG	TTCCCTGTGG	AGTACTAGAG	GGCCTGGGGA	CTCCAGTGTA
1030	1040	1050	1060	1070	1080
GGTGGTGGT	GGACGTGAGC	CACGAAGACC	CTGAGGTCAA	GTTCAACTGG	TACGTGGACG
CGCACCAACA	CCTGCACCTG	GTGCTTCTGG	GACTCCAGTT	CAAGTTGACC	ATGCACCTGC
1090	1100	1110	1120	1130	1140
GGGTGGAGGT	GCATAATGCC	AAGACAAAGC	CGGGGAGGA	GCAGTACAAC	AGCACGTACC
CGACCTCCA	CGTATTACGG	TTCTGTCTCG	SCGCCCTCCT	CGTCATGTTG	TCGTGCATGG
1150	1160	1170	1180	1190	1200
GTGTGGTCAG	CGTCTTCACC	GTCTGACACC	AGGACTGGCT	GAATGGCAAG	GAGTACAAGT
CACACCAAGTC	GCAGGAGTGG	CAGGACCTGG	TCCTGACCGA	CTTACCGTTC	CTCATGTTCA

ON0146A NP

33/53

FIG. 19C

Primary Sequence = SEQ ID NO:23

Complementary Sequence = SEQ ID NO:29

pD17-hG1b									
312	1210	1220	1230331	1240	1250	1260			
GCAAGGCTC	CAACAAGCC	CTCCAGCCC	CCATCGAGAA	AACCATCTCC	AAAGCCAAAG				
CGTTCCAGAG	GTGTGTTCCG	GAGGTCGGG	GGTAGCTCTT	TTGGTAGAGG	TTTCGGTTTC				
1270	1280	1290	1300	1310	1320				
GTGGGACCCG	TGGGGTGCGA	GGGCCACATG	GACAGAGGCC	GGCTCGGCCC	ACCCCTCTGCC				
CACCCITGGGC	ACCCACGCT	CCCGGTGTAC	CTGTCTCCGG	CCGAGCCGGG	TGGGAGACGG				
1330	1340	1350	1360	1370	1380				
CTGAGAGTGA	CCGCTGTACC	AACCTCTGTC	CCTACAGGGC	AGCCCCGAGA	ACCACAGGTG				
GACTCTCACT	GGCGACATGG	TTGGAGACAG	GGATGTCCCG	TGGGGGCTCT	TGGTGTCCAC				
1390	1400	1410	1420	1430	1440				
TACACCCCTGC	CCCCATCCCG	GGATGAGCTG	ACCAAGAACC	AGGTCAGCCT	GACCTGCCTG				
ATGTGGGACG	GGGTAGGGC	CCTACTCGAC	TGGTCTTGG	TCCAGTCCGA	CTGGACGGAC				
1450	1460	1470	1480	1490	1500				
GTCAAAGGCT	TCTATCCGAG	CGACATCGCC	GTGACTGGG	AGAGCAATGG	GCAGCCGGAG				
CAGTTTCCGA	AGATAGGGTC	GCTGTAGCGG	CACCTCACCC	TCTCGTTACC	CGTCGGCCTC				
1510	1520	1530	1540	1550	1560				
AACAACATACA	AGACCACGCC	TCCCGTGCTG	GACTCCGACG	GCTCCTTCTT	CCCTCTACAGC				
TTGTTGATGT	TCTGGTGGCG	AGGGCACGAC	CTGAGGCTGC	CGAGGAAGAA	GGAGATGTCG				
1570	1580	1590	1600	1610	1620				
AAGCTCACCG	TGGACAAGAG	CAGGTGGCAG	CAGGGGAACG	TCTTCTCATG	CTCCGTGATG				
TTCCAGTGGC	ACCTGTTCTC	GTCCACCGTC	GTCCCCCTGC	AGAAAGATAC	GAGGCACATC				
1630	1640	1650	1660	1670	1680				
CATGAGGCTC	TGCACAACCA	CTACACGCAG	AAGAGCCCTCT	CCCTGTCTCC	GGGTAAATGA				
GTACTCTCCGAG	ACGTGTTGGT	GATGTGCCGC	TTCTCGGAGA	GGGACAGAGG	CCCATTACT				
1690	1700	1710	1720	1730	1740				
GTGCGACGGC	CGGCAAGCCC	CCGCTCCCCG	GGCTCTCGCG	GTGCGACGAG	GATGCTTGGC				
CACGCTGCCG	GCCGTTCCGG	GGCGAGGGGC	CCGAGAGCGC	CAGCGTGTCT	CTACGAACCG				
1750	1760	1770	1780	1790	1800				
ACGTACCCCC	TGTACATACT	TCCCGGGCGC	CCAGCATGGA	AATAAAGCAC	CCAGCGCTGC				
TGCATGGGGG	ACATGTATGA	AGGGCCCGCG	GGTCGTACCT	TTATTTCCGT	GGTCGGGACG				

ON0146A NP

34/53

FIG. 19D

Primary Sequence = SEQ ID NO:23
 Complementary Sequence = SEQ ID NO:29

pD17-hG1b									
1810	1820	1830	1840	1850	1860				
CCTGGGCCCC	TGCAGACTG	TGATGGTTCT	TTCCACGGGT	CAGGCCGAGT	CTGAGGCCCTG				
GGACCCGGGG	ACGCTCTGAC	ACTACCRAGA	AAGGTGCCCA	GTCCGGCTCA	GACTCCGGAC				
1870	1880	1890	1900	1910	1920				
AGTGGCATGA	GGGAGGCAGA	GCGGTCCCA	CTGTCCCCAC	ACTGGCCCAG	GCTGTGCAGG				
TCACCGTACT	CCCTCCGTCT	CGCCCAGGGT	GACAGGGGTG	TGACCGGGTC	CGACACGTCC				
1930	1940	1950	1960	1970	1980				
TGTGCCCTGG	CCCCCTAGGG	TGGGGCTCAG	CCAGGGCTG	CCCTCGGCAG	GGTGGGGGAT				
ACACGGACCC	GGGGATCCC	ACCCGAGTC	GGTCCCCGAC	GGGAGCCGTC	CCACCCCTTA				
1990	2000	2010	2020	2030	2040				
TTGCCAGCGT	GGCCCTCCCT	CCAGCAGCAC	CTGCCCTGGG	CTGGGCCACG	GGAGGCCCTA				
AACGTCGCA	CCGGAGGGA	GGTCGTCTGT	GACGGACCC	GACCCGGTGC	CCTTCGGGAT				
2050	2060	2070	2080	2090	2100				
GGAGCCCTG	GGGACAGACA	CACAGCCCT	GCCTCTGTAG	GAGACTGTCC	TGTTCTGTGA				
CCTCGGGAC	CCCTGTCTGT	GTGTCGGGA	CGGAGACATC	CTCTGACAGG	ACAAACACT				
2110	2120	2130	2140	2150	2160				
GCGCCCTGT	CCTCCCGACC	TCCATGCCCA	CTCGGGGCA	TGCTGGGGAT	GCGGTGGGCT				
CGCGGGGACA	GGAGGCTGG	AGGTACGGGT	GAGCCCCCGT	ACGACCCCTA	CGCCACCCGA				
2170	2180	2190	2200	2210	2220				
CTATGGCTTC	TGAGGCGNA	AGAACCAGCT	GGGGCTCTAG	GGGGTATCCC	CACGGGCCCT				
GATACCGAAG	ACTCCGCTT	TCTTGOTCGA	CCCCGAGATC	CCCCATAGGG	GTGCGCGGGA				
2230	2240	2250	2260	2270	2280				
GTAGCGGCGC	ATTAGCGCG	GCGGTGTGG	TGGTACGCG	CAGCGTGACC	GCTACACTTG				
CATCGCCGCG	TAAATCGCGC	CGCCACACCC	ACCAATGCGC	GTGCGACTGG	CGATGTGAAC				
2290	2300	2310	2320	2330	2340				
CCAGCGCCCT	AGCGCCCGCT	CCTTTCGCTT	TCTTCCCTTC	CTTCTCGCC	ACGTTCCGCG				
GGTCGCGGGA	TCGCGGGCGA	GGAAAGCGAA	AGAGGGGAAG	GAAAGAGCGG	TGCAAGCGGC				
2350	2360	2370	2380	2390	2400				
GCTTCCCGG	TCAAGCTCTA	AATCGGGCA	TCCCTTTAGG	GTTCCGATTT	AGTGTCTTAC				
CGAAGGGGC	AGTTCGAGAT	TTAGCCCGGT	AGGGAATCC	CAAGCTAAA	TCACGAAATG				

35/53

FIG. 19E

Primary Sequence = SEQ ID NO:23

Complementary Sequence = SEQ ID NO:29

pD17-hG1b									
2410	GGGACCCTCGA	CCCCAANA	CTTGATTAGG	GTGATGTTTC	ACGTAGTGGG	2450	CCATCGCCCT	GGTAGCGGGA	2460
	CCGTGGAGCT	GGGGTTTTT	GAACTAATCC	CACTACCAAG	TGCATCACCC				
2470	GATAGACGGT	TTTTCGCCCT	TTGACGTTGG	AGTCCACGTT	CTTTAATAGT	2510	GGACTCTTGT	CCTGAGAACA	2520
	CTATCTGCCA	AAAAGCGGGA	AACTGCAACC	TCAGGTGCAA	GAAATTATCA				
2530	TCCAAACTGG	AAACAACACTC	AAACCCTATCT	CGGTCTATTC	TTTTGATTTA	2570	TAAGGGATTT	AATCCCTAAA	2580
	AGGTTTGACC	TTGTTGTGAG	TTGGGATAGA	GCCAGATAAG	AAAACATAAT				
2590	TGGGGATTTC	GGCCTAATGG	TTAAAAAATG	AGCTGATTTA	ACAAAAATTT	2630	AACGCGAATT	TTGGCGCTTAA	2640
	ACCCCTAAAG	CCGGATTAACC	AATTTTTTAC	TGCACTAANT	TGTTTTTAAA				
2650	AATTCGTGGG	AATGTGTGTC	AGTTAGGGTG	TGGAAGTCC	CCAGGCTCCC	2690	CAGGCAGGCA	GTCCGTCCGT	2700
	TTAAGACACC	TTACACACAG	TCAATCCCAC	ACCTTTCAGG	GGTCCGAGGG				
2710	GAAATATGCA	AAGCATGCAT	CTCAATTAGT	CAGCAACCAT	AGTCCCGCCC	2750	CTAATCTCCG	GATTGAGGCG	2760
	CTTCATACGT	TTCTGTACGTA	GAGTTAATCA	GTCTGTGTA	TCAGGGCGGG				
2770	CCATCCCGCC	CCTAATCTCG	CCCACTTCCC	CCCATTTCTCC	GGCCCATGGC	2810	TGACTAATTT	ACATGATTAA	2820
	GGTAGGGCGG	GGATTGAGCC	GGGTCAAGGC	GGGTAAGAGG	CGGGGTACCG				
2830	TTTTTATTTA	TGCAAGGGCC	GAGGCCGCCCT	CGGCTCTGA	GCTATTCCAG	2870	AAGTAGTGAG	TTCATCACTC	2880
	AAAAATAAAT	ACGTCCTCCG	CTCCGGCGGA	GCCGGAGACT	CGATTAAGGTC				
2890	GAGGCTTTT	TGGAGGCCCTA	GGCTTTTGCA	AAAAGCTTGG	ACAGCTCAGG	2930	GCTGCGATTT	CGACGCTAAA	2940
	CTCCGANAANA	ACCTCCGGAT	CCGAAAACGT	TTTTTGAACC	TGTCGAGTCC				
2950	CGCGCCAAAC	TTGACGGCAA	TCCTAGCGTG	AAGGCTGGTA	GGATTTTATC	2990	CCCCCTGCCA	GGGCGACGGT	3000
	CGCGGGTTTG	AACTGCCGTT	AGGATGCGAC	TTCCGACCAT	CCTAAAATAG				

ON0146A NP

36/53

FIG. 19F

Primary Sequence = SEQ ID NO:23

Complementary Sequence = SEQ ID NO:29

pD17-hG1b

3010	3020	3030	3040	3050	3060
TCATGGTTCG	ACCATGAAAC	TGCATCGTCG	CCGTGTCCCA	AAATATGGGG	ATTGGCARGA
AGTACCAAGC	TGGTAACCTG	ACGTAGCAGC	GGCACAGGGT	TTTATACCCC	TAAACGTTCT
3070	3080	3090	3100	3110	3120
ACGGAGACCT	ACCCTGGCCT	CCGCTCAGGA	ACGAGTTCAA	GTACTTCCAA	AGAAAGACCA
TGCCTCTGGA	TGGGACCGGA	GGCGAGTCCT	TGCTCAAGTT	CATGAAGGTT	TCCTACTGGT
3130	3140	3150	3160	3170	3180
CAACCTCTTC	AGTGGAGGT	AACAGAAATC	TGGTGATTAT	GGGTAGGAAA	ACCTGGTTCT
GTGGAGAAG	TCACCTTCCA	TTTGTCTTAG	ACCACATAA	CCCATCCTTT	TGGACCAAGA
3190	3200	3210	3220	3230	3240
CCATTCCTGA	GAAGAATCGA	CCTTTAAAGG	ACAGAAATTA	TATAGTTCTC	AGTAGAGAAC
GGTAAGGACT	CTTCTTAGCT	GGAATTTCC	TGCTTAAAT	ATATCAGAG	TCATCTCTTG
3250	3260	3270	3280	3290	3300
TCAAGAAACC	ACCACGAGGA	GCTCATTTTC	TTGCCAAAG	TTTGGAAAGT	GCCTTAAGAC
AGTTTCITGG	TGGTGCTCCT	CQAGTAAAG	AACGGTTTTC	AAACCTACTA	CGGAATTC TG
3310	3320	3330	3340	3350	3360
TTATTGAAAC	ACCGGAATTG	GCAAGTAAAG	TAGACATGGT	TTGGATAGTC	GGAGGCAAGT
ATAACTTGT	TGGCCTTAAC	CGTTCATTTT	ATCTGTACCA	AACCTATCAG	CCTCCGTCAA
3370	3380	3390	3400	3410	3420
CTGTTTACCA	GGAGCCCATG	ATCAACCCAG	GCCACCTTAG	ACTCTTTGTG	ACRAGGATCA
GACAAATGGT	CCTTCGGTAC	TTAGTTGGTC	CGGTGGAATC	TGAGAAACAC	TGTTCTTAGT
3430	3440	3450	3460	3470	3480
TGCAGGAATT	TGAAAGTGAC	ACGTTTTC	CAGAAATGA	TTTGGGGAAA	TATAAATTC
ACGTCCTTAA	ACTTTCAC TG	TGCAAAAGG	GTCTTAACT	AAACCCCTTT	ATATTGAAG
3490	3500	3510	3520	3530	3540
TCCAGATA	CCCAGGGGTC	CTCTCTGAGG	TCCAGGAGGA	AAAAGGCATC	AAGTATAAGT
AGGGTCTTAT	GGTCCGCAG	GAGAGACTCC	AGGTCTCTCT	TTTTCCGTAG	TTCAATATCA
3550	3560	3570	3580	3590	3600
TTGAAGTCTA	CGAGAAGAAA	GACTAACAGG	AGATGCTTT	CAAGTCTCT	GCTCCCTCC
AACTTCAGAT	GCTCTTCTTT	CTGATTGTC	TTCTACGAAA	GTTCAGAGAA	CGAGGGGAGG

ON0146A NP

37/53

FIG. 19G

Primary Sequence = SEQ ID NO:23
 Complementary Sequence = SEQ ID NO:29

pD17-hG1b

3610	TAAGCTATG	3620	CATTTTATA	3630	AGACCATGG	3640	ACTTTGCTG	3650	GCTTGTATC	3660	TCTTTGTGA
	ATTTCGATAC		GTAAAAATAT		TCGTGTACCC		TGAAAAAGAC		CGAATCTAG		AGAAACACTT
3670	GGAACCTTAC	3680	TTCTGTGGTG	3690	TGACATTAAT	3700	GGACAACTA	3710	CCTACAGAGA	3720	TTTAAAGCTC
	CCTTGGATG		AAGACACCAC		ACTGTATTAA		CCTGTTTGAT		GGATGCTCT		AAATTTCGAG
3730	TAAGGTAAAT	3740	ATAAATTTT	3750	TAAGTGTATA	3760	ATGTGTTTAA	3770	CTACTGATTC	3780	TAATTGTTTG
	ATTCCATTTA		TATTTTAAAA		ATTCACATAT		TACACRATTT		GATGACTAAG		ATTAAACAAC
3790	TGATATTTAG	3800	ATTCCAACCT	3810	ATGGAAGTGA	3820	TGAAATGGAG	3830	CAGTGGTGG	3840	ATGCCTTTAA
	ACATAAATC		TAAGGTTGGA		TACCTTGACT		ACTTACCCTC		GTCACCACT		TACGGAAATT
3850	TGAGGAAAC	3860	CTGTTTGTCT	3870	CAGAGAAAT	3880	GCCATCTAGT	3890	GATGATGAG	3900	CTACTGCTGA
	ACTCCTTTTG		GACAAAACGA		GTCTTCTTTA		CGGTAGATCA		CTACTACTCC		GATGACGACT
3910	CTCTCAACAT	3920	TCTACTCCTC	3930	CAAAAAAGAA	3940	GGAAAGGTA	3950	GAAGACCCCA	3960	AGGACTTTCC
	GGAGCTTGTA		AGATGAGGAG		GTTTTTCTT		CTCTTTCCAT		CTTCTGGGGT		TCCTGAAAGG
3970	TTCAGAAATG	3980	CTAAGTTTTT	3990	TGAGTCAATG	4000	TGTGTTTAGT	4010	AATAGAACTC	4020	TTGCTTGCTT
	AAGTCTTAAC		GAATCAAAAA		ACTCAGTAGG		ACACAAATCA		TTATCTTGAG		AACGAAAGAA
4030	TGCTATTATC	4040	ACCACAAGG	4050	AAAAAGCTGC	4060	ACTGCTATAC	4070	AAGAAATTA	4080	TGGAAATAA
	ACGATAAATG		TGGTGTTTCC		TTTTTCGACG		TGACGATATG		TTCTTTTAAT		ACCTTTTAT
4090	TTCTGTAAAC	4100	TTTTTAAGTA	4110	GGCATAACAG	4120	TTAATAATCT	4130	AACAACTGT	4140	TTTTTCTTAC
	AAGACATTTG		AAATATTCAT		CCGTATTGTC		AATATTAGTA		TTGTAAGACA		AAAAAGAAAG
4150	TCCACACAGG	4160	CATAGAGTGT	4170	CTGCTATTAA	4180	TAACATATGCT	4190	CAAAAAATGT	4200	GTACCTTTAG
	AGGTGTGTCC		GTATCTCACA		GAACATAATT		ATTGATACGA		GTTTTAAACA		CATGGAATC

ON0146A NP

38/53

FIG. 19H

Primary Sequence = SEQ ID NO:23

Complementary Sequence = SEQ ID NO:29

		pD17-hG1b	
4210	CTTTTAAAT	4220	TGTAAGGGG
	GAAAAATTAA	4230	TTAATAAGGA
		4240	ATATTGATG
		4250	TATAGTGCCT
		4260	TGACTAGAGA
			ACTGATCTCT
4270	TCATANTCAG	4280	CCATACCACA
	AGTATTAGTC	4290	TTTGTAGAGG
		4300	TTTACTTGC
		4310	TTTAAAAAAC
		4320	CTCCACACCC
			GAGGGTGTGG
4330	TCCCCCTGAA	4340	CCTGAACAT
	AGGGGGACTT	4350	AAAATGAATG
		4360	CAATTGTTGT
		4370	TGTTAACTTG
		4380	TTTATTGCAG
4390	CTTATAATGG	4400	TTACAAATAA
	GAAATATTACC	4410	AGCAATAGCA
		4420	TCACAAATTT
		4430	CACAAATAAA
		4440	GCATTTTTTT
4450	CACATGCATTC	4460	TAGTTGTGGT
	GTGACGTAAG	4470	TTGTCCAAAC
		4480	TCATCAATGT
		4490	ATCTTATCAT
		4500	GTCTGGATCG
4510	GCTGGATGAT	4520	CCTCCAGCGC
	CGACCTACTA	4530	GGGATCTCA
		4540	TGCTGGAGTT
		4550	CTTCGCCCCAC
		4560	CCCAACTTGT
4570	TTATTGCAGC	4580	TTATAATGGT
	AATACGTCTG	4590	TACAAATAAA
		4600	GCAATAGCAT
		4610	CACAAATTTT
		4620	ACAAATAAAG
4630	CATTTTTTTC	4640	ACTGCATCT
	GTAABAAAAAG	4650	AGTTGTGGTT
		4660	TGTCCAAACT
		4670	CATCAATGTA
		4680	TCCTATCATG
4690	TCTGTATACC	4700	GTCGACCTCT
	AGACATATGG	4710	AGCTAGAGCT
		4720	TGGCGTAATC
		4730	ATGGTCATAG
		4740	CTGTTTCCCTG
4750	TGTGAATATG	4760	TTATCCGCTC
	ACACTTTTAA	4770	ACAATTCAC
		4780	ACAACATACG
		4790	AGCCGGAAGC
		4800	ATAAAGTGTA
			TATTTACAT
			TCGGCCCTTCG
			TATTTACAT

ON0146A NP

39/53

FIG. 19I

Primary Sequence = SEQ ID NO:23
 Complementary Sequence = SEQ ID NO:29

pD17-hG1b

4810	4820	4830	4840	4850	4860
AAGCCTGGGG	TGCCTAATGA	GTGAGCTAAC	TCACATTAAAT	TGCGTTGCGC	TCACTGCCCG
TTCGGACCCC	ACGGATTACT	CACTCGATTG	AGTGTAAATTA	ACGCAACGCG	AGTGACGGGC
4870	4880	4890	4900	4910	4920
CTTTCCAGTC	GGGAACCTG	TCGTGCCAGC	TGCATTAAATG	AATCGGCCAA	CGCGCGGGGA
GAAAGGTCAG	CCCTTTGGAC	AGCACGGTCG	ACGTAATTAC	TTAGCCGGTT	GCAGCGCCCT
4930	4940	4950	4960	4970	4980
GAGGCGGTTT	GCGTATTGGG	CGCTCTTCCG	CTTCTCTCGT	CACCTGACTCG	CTGGGCTCGG
CTCCGCCAAA	CGCATAACCC	GCGAGAGGCG	GAAGGAGCGA	GTGACTGAGC	GACGGGAGCC
4990	5000	5010	5020	5030	5040
TGGTTGCGCT	GCGGGGAGCG	GTATCAGCTC	ACTCAAGGC	GGTAATACGG	TTATCCACAG
AGCAGGCCGA	CGCCGCTCGC	CATAGTCGAG	TGAGTTTCCG	CCATTATGCC	AATAGGTGTC
5050	5060	5070	5080	5090	5100
AATCAGGGGA	TAAGGCAGGA	AAGAACAATG	GAGCAAAAGG	CCAGCAAAG	GCCAGGAACC
TTAGTCCCT	ATTGCGTCT	TTCTTGATACA	CTCGTTTCC	GATCGTTTTC	CGGTCCCTGG
5110	5120	5130	5140	5150	5160
GTAAAGGCG	CGCGTTCCTG	GCGTTTTC	ATAGGCTCCG	CCCCCTGAC	GAGCATCACA
CATTTTCCG	GCGCAACGAC	CGCAAAAGG	TATCCGAGGC	GCGGGGACTG	CTCGTAGTGT
5170	5180	5190	5200	5210	5220
AAATCGACG	CTCAGTTCAG	AGGTGGCGAA	ACCGACACAG	ACTATAAGA	TACCAGGCGT
TTTTAGCTGC	GAGTTCAGTC	TCCACCGCTT	TGGGCTGTCC	TGATATTCT	ATGGTCCGCA
5230	5240	5250	5260	5270	5280
TTCCCCCTGG	AAGCTCCCTC	GTGCGCTCTC	CTGTTCGAC	CCTGCCGCTT	ACCGGATACC
AAGGGGACC	TTCCAGGGAG	CACGCGAGAG	GACNAGGCTG	GGACGGCGAA	TGGCCTATGG
5290	5300	5310	5320	5330	5340
TGTCCGCCCT	TCTCCCTTCG	GGAAGCGTGG	CGCTTTCTCA	ATGCTCACGC	TGTAGGTATC
ACAGGCGGAA	AGAGGGAAGC	CCTTCCGACC	GCGAAGAGGT	TACGAGTGC	ACATCCATAG
5350	5360	5370	5380	5390	5400
TCAGTTCGGT	GTAGGTCGTT	CGCTCCAAGC	TGGGCTGTGT	GCAAGAACCC	CCCGTTCAGC
AGTCAAGCCA	CATCCAGCAA	GCGAGGTTCC	ACCCGACACA	CGTGTCTGGG	GGGCAAGTCC

ON0146A NP

40/53

FIG. 19J

Primary Sequence = SEQ ID NO:23
 Complementary Sequence = SEQ ID NO:29

pD17-hG1b

5410	5420	5430	5440	5450	5460
CCGACCGCTG	CGCCTTATCC	GCTAACTATC	GTCTTGAGTC	CAACCCGGTA	AGACACGACT
GGCTGGCGAC	GCGGAATAGG	CCATTGATAG	CAGAACTCAG	GTTGGGCCAT	TCTGTGCTGA
5470	5480	5490	5500	5510	5520
TATCGCCACT	GGCAGCAGCC	ACTGGTAACA	GGATTAGCAG	AGCGAGGTAT	GTAGGCGGTG
ATAGCGGTGA	CCGTGCTCGG	TGACCATTTG	CCTAATCGTC	TCGCTCCATA	CATCCGCCAC
5530	5540	5550	5560	5570	5580
CTACAGAGTT	CTTGAAGTGG	TGGCCCTAACT	ACGGCTACAC	TAGRAGGACA	GTATTTGGTA
GATGTCCTCA	GAACTTCACC	ACCGGATTGA	TGCCGATGTG	ATCTTCCTGT	CATAAACCAT
5590	5600	5610	5620	5630	5640
TCTGCGCTCT	GCTGAAGCCA	GTTACCTTCG	GAAAAAGAGT	TGGTAGCTCT	TGATCCGGCA
AGACGCGAGA	CGACTTCGGT	CAATGGAAGC	CTTTTCTCA	ACCATCGAGA	ACTAGGCCGT
5650	5660	5670	5680	5690	5700
AACAACCCAC	CGCTGGTAGC	GGTGGTTT	TGTTTGCNA	GCAGCAGATT	ACGCGCAGAA
TGTTTGGTG	GCGACCATCG	CCACCANA	AACARACGTT	CGTCGTCTAA	TGCGCGTCTT
5710	5720	5730	5740	5750	5760
AAAAGGATC	TCAAGAGAT	CCTTTGATCT	TTTCTACGGG	GTCTGACGCT	CAGTGGACGG
TTTTTCCTAG	AGTTCTTCTA	GGAACCTAGA	AAAGATGCCC	CAGACTGCGA	GTACACCTTGC
5770	5780	5790	5800	5810	5820
AAACCTCACG	TTAAGGGATT	TGGTCACTGA	GATTATCAAA	AAGGATCTTC	ACCTAGATCC
TTTTTGAGTGC	AATTCCTTAA	AACGATACT	CTAATAGTTT	TTCTTAGAAG	TGATCTAGG
5830	5840	5850	5860	5870	5880
TTTTAAATTA	ANAATGAAGT	TTTAAATCAA	TCTAAGATAT	ATATGAGTAA	ACTTGGTCTG
AAAATTTAAT	TTTTACTTCA	AAATTTAGTT	AGATTTCATA	TATACTCAT	TGAACGAGAC
5890	5900	5910	5920	5930	5940
ACAGTTACCA	ATGCTTAATC	AGTGAGGCAC	CTATCTCAGC	GATCTGTCTA	TTTCGTTTCT
TGTCAATGGT	TACGAATTAG	TCACTCCGCG	GATAGAGTCG	CTAGACAGAT	AAAGCAAGTA
5950	5960	5970	5980	5990	6000
CCATAGTTGC	CTGACTCCCC	GTCGTGTAGA	TAACTACGAT	ACGGGAGGCG	TTACCATCTG
GGTATCAACG	GACTGAGGGG	CAGCACATCT	ATTGATGCTA	TGCCCTCCCG	AATGGTAGAC

ON0146A NP

41/53

FIG. 19K

Primary Sequence = SEQ ID NO:23
 Complementary Sequence = SEQ ID NO:29

pD17-hG1b

6010	6020	6030	6040	6050	6060
GCCCAGTGC	TGCATGATA	CCGCGAGACC	CACGCTCACC	GGCTCCAGAT	TTATCAGCAA
CEGGGTACG	ACGTTACTAT	GGCGCTCTGG	GTGCGAGTGG	CCGAGGTCTA	AATAGTCGTT
6070	6080	6090	6100	6110	6120
TAAACCAACC	AGCCGGAGGG	GCCGAGCGCA	GAAGTGGTCC	TGCAACTTTA	TCCGCCCTCCA
ATTYGGTCGG	TCGGCCCTTCC	CGGCTCGCGT	CTTCACCAGG	ACGTTGAAAT	AGGCGGAGGT
6130	6140	6150	6160	6170	6180
TCCAGTCTAT	TAATTGTTGC	CGGGAAGCTA	GAGTAAGTAG	TTCCGCCAGTT	AATAGTTTGC
AGGTCAGATA	ATTAAACRACG	GCCCTTCGAT	CTCATTCATC	AAGCGGTCAA	TTATCAAAACG
6190	6200	6210	6220	6230	6240
GCAACGTTGT	TGCCATTGCT	ACAGGCATCG	TGOTGTACAG	CTCGTCGTTT	GGTATGGCTT
CGTTGCAACA	ACGGTAACGA	TGTCCGTAGC	ACCNCAGTGC	GAGCAGCAAA	CCATACCGBA
6250	6260	6270	6280	6290	6300
CATTCACTC	CGGTTCCCAA	CGATCAAGGC	GAGTTACATG	ATCCCCCATG	TTGTGCAAAA
GTAAGTCGAG	GCCAGGGTT	GCTAGTTCGG	CTCAATGTAC	TAGGGGGTAC	AACACGTTTT
6310	6320	6330	6340	6350	6360
AAGCGGTTAG	CTCCTTCCGT	CCTCCGATCG	TTGTCAGAG	TAGTTGGCC	GCAGTGTAT
TTCCCAATC	GAGGAAGCCA	GGAGGCTAGC	AACAGTCTTC	ATTCAACGGG	CGTCACATA
6370	6380	6390	6400	6410	6420
CACTCATGCT	TATGGCAGCA	CTGCATAATT	CTCTTACTGT	CATGCCATCC	GTAAGATGCT
GTGAGTACCA	ATACCGTCCG	GGCGTATTAA	GAGANTGACA	GTACGGTAGG	CATTCTACGA
6430	6440	6450	6460	6470	6480
TTTCTGTGAC	TGGTGAGTAC	TCAACCAAGT	CATTCTGAGA	ATAGTGTATG	CGGCGACCGA
AAAGACACTG	ACCACTCATG	AGTTGGTTCA	GTAAAGACTCT	TATCANCATAC	GCCECTGGCT
6490	6500	6510	6520	6530	6540
GTTCCTCTTG	CCCGGCGTCA	ATACGGGATA	ATACCGCGCC	ACATAGCAGA	ACTTTAAAG
CAACGAGAAC	GGGCGGCGAGT	TATGCCCTAT	TATGGCGCGG	TGTATCGTCT	TGAATTTTC
6550	6560	6570	6580	6590	6600
TGCTCATCAT	TGGAACACGT	TCTTCGGGGC	GAAACTCTC	AAGGATCTTA	CCGCTGTGGA
ACGAGTAGTA	ACCTTTTGCA	AGAAAGCCCCG	CTTTTGAGAG	TTCTTAGAAT	GGCGACAACT

ON0146A NP

42/53

FIG. 19L

Primary Sequence = SEQ ID NO:23

Complementary Sequence = SEQ ID NO:29

pD17-hG1b

6610	GATCCAGTTC	6620	GATGTAAACC	6630	ACTCGTGCAC	6640	CCNACTGATC	6650	TTGAGCATCT	6660	TTTACTTTCA
	CTAGGTCAAG		CTACATTTGG		TGAGCACCGT		GGTTGACTAG		AAATCGTAGA		AAATGAAAGT
6670	CCAGCGTTTC	6680	TGGGTGAGCA	6690	AAAACAGGAA	6700	GGCAAAATGC	6710	CGCAAAATAG	6720	GGATTAAGGG
	GGTCGCAAG		ACCCACTCGT		TTTTGTCCCT		CCGTTTACG		GGCTTTTTC		CCCTATTCCC
6730	CGACACGGAA	6740	ATGTTGAATA	6750	CTCATACTCT	6760	TCCTTTTC	6770	ATATTATGA	6780	AGCATTTATC
	GCTGTGCCT		TACAACTTAT		GAGTATGAGA		AGGAAAAGT		TATAATACT		TCGTAANTAG
6790	AGGGTTATTG	6800	TCTCATGAGC	6810	GGATACATAT	6820	TTGAAATGAT	6830	TTAGAAATAT	6840	AAACAATAG
	TCCCNATAAC		AGAGTACTCG		CCTATGTATA		AACTTACATA		ATCTTTTTA		TTTGTTTATC
6850	GGGTCCGCG	6860	CACATTTCCC	6870	CGAAAGTGC	6880	CACCTGACGT	6890	CGACGGATCG	6900	GGAGATCTGC
	CCCAAGGCGC		GTGTAAAGGG		GCYTTTCAG		GTGACTGCA		GCTGCTAGC		CCTCTAGAGC
6910	TAGGTGACCT	6920	GAGGCGCGCC	6930	GGCTTCGAAT	6940	AGCCAGAGTA	6950	ACCTTTTTT	6960	TTAATTTTAT
	ATCCACTGGA		CTCCGCGCGG		CCGAGCTTA		TGGTCTCAT		TGGAAAATA		AAATTAATA
6970	TTTATTTTAT	6980	TTTTGAGATG	6990	GAGTTTGGCG	7000	CCGATCTCCC	7010	GATCCCCAT	7020	GGTCGACICT
	AAATAAATA		AAACTCTAC		CTCAAACCGC		GGCTAGAGGG		CTAGGGGATA		CCAGCTGAGA
7030	CAGTACAATC	7040	TGCTCTGATG	7050	CCGCATAGTT	7060	AAGCCAGTAT	7070	CTGCTCCCTG	7080	CTTGTGTGTT
	GTCNTGTTAG		ACGAGACTAC		GGCGTATCAA		TTGGGTCTATA		GACGAGGGAC		GAACACACAA
7090	GGAGGTCGCT	7100	GAGTAGTGCG	7110	CGAGCAAAAT	7120	TTAAGCTACA	7130	ACAAGGCAAG	7140	GCTTGACCGA
	CCTCCAGCGA		CTCATCAGCG		GCTCGTTTTA		AAATCGATGT		TGTTCCGTTT		CGAACTGGCT
7150	CAATTGCATG	7160	AAGATCTGCG	7170	TTAGGGTTAG	7180	GGCTTTTGG	7190	CTGCTTCGCG	7200	ATGTACGGGC
	GTTAACGTAC		TTCTTAGACG		AATCCCAATC		CGCAAAACGC		GACGAGGGCG		TACATGCCCG

ON0146A NP

43/53

FIG. 19M

Primary Sequence = SEQ ID NO:23

Complementary Sequence = SEQ ID NO:29

pD17-hG1b									
7210	7220	7230	7240	7250	7260				
CAGATATACG	CGTTGACATT	GATTATTGAC	TAGTTATTAA	TAGTAATCAA	TTACGGGGTC				
GTCTATATGC	GCAACTGTAA	CTAATAACTG	ATCAATAATT	ATCAATTAGT	AATGCCCCAG				
7270	7280	7290	7300	7310	7320				
ATTAGTTTCAT	AGCCCATATA	TGGAGTTCCG	CGTTACATPA	CTTACGGTAA	ATGGCCCGCC				
TAATCNAAGTA	TGGGGTATAT	ACCTCAAGGC	GCANTGTATT	GAATGCCATT	TACGGGGCCG				
7330	7340	7350	7360	7370	7380				
TGGCTGACCG	CCCAAGGACC	CCGGCCCAT	GACGTCAATA	ATGACGTATG	TTCCCATAGT				
ACCGACTGGC	GGGTTCCTGG	GGCGGGGTAA	CTGCAGTTAT	TACTGCATAC	AAGGGTATCA				
7390	7400	7410	7420	7430	7440				
AACGCCAATA	GGGACTTTCC	ATTGACGTCA	ATGGGTGGAC	TATTTACGGT	AAACTGCCCA				
TTGGGGTTAT	CCCTGAAAGG	TAACTGCAGT	TACCCACCTG	ATAAATGCCA	TTTGACGGGT				
7450	7460	7470	7480	7490	7500				
CTTGGCAGTA	CATCAAGTGT	ATCATATGCC	AAGTACGCC	CCTATTGACG	TCAATGACGG				
GAACCGTCAT	GTAGTTTACA	TAGTATACGG	TTCAATCGGG	GGATAACTGC	AGTTACTGCC				
7510	7520	7530	7540	7550	7560				
TAAATGGCCC	GCCTGGCATT	ATGCCCAGTA	CATGACCTTA	TGGGACTTTC	CTACTTGGCA				
ATTTACCGGG	CGGACCGTAA	TACGGGTCA	GTACTTGAAT	ACCTGAAAG	GATGAACCGT				
7570	7580	7590	7600	7610	7620				
GTACATCTAC	GTATTAGTCA	TCCCTATTAC	CATGGTGTATG	CGGTTTTGGC	AGTACATCAA				
CATGTAGATG	CATAATCAGT	AGCGATATATG	GTACCACCTAC	GCCAAAACCG	TCAATGTAGTT				
7630	7640	7650	7660	7670	7680				
TGGGCGTGGA	TAGCGGTTTG	ACTCACGGGG	ATTTCCAGT	CTGCACCCCA	TTGACGTCAA				
ACCGGCACCT	ATGCGCNAAC	TGAGTGCCTCC	TAAAGTTCA	GAGGTGGGGT	NACTGCAGTT				
7690	7700	7710	7720	7730	7740				
TGGGAGTTTG	TTTITGGCAC	AAATATCAACG	GGACTTTCCA	AAATGTGTTA	ACAACTCCGC				
ACCCTCAAAC	AAATCCGTGG	TTTTAGTTGC	CCGAAAGGT	TTTACAGCAT	TGTTGAGGCG				
7750	7760	7770	7780	7790	7800				
CCCATTGACG	CAANTGGGCG	GTAGGCGTGT	ACGGTGGGAG	GTCTATATAA	GCAGAGCTCT				
GGGTAACTGC	GTTTACCCGC	CATCCGCACA	TGCCACCTTC	CAGATATATT	CGTCTCGAGA				

ON0146A NP

44/53

FIG. 19N

Primary Sequence = SEQ ID NO:23

Complementary Sequence = SEQ ID NO:29

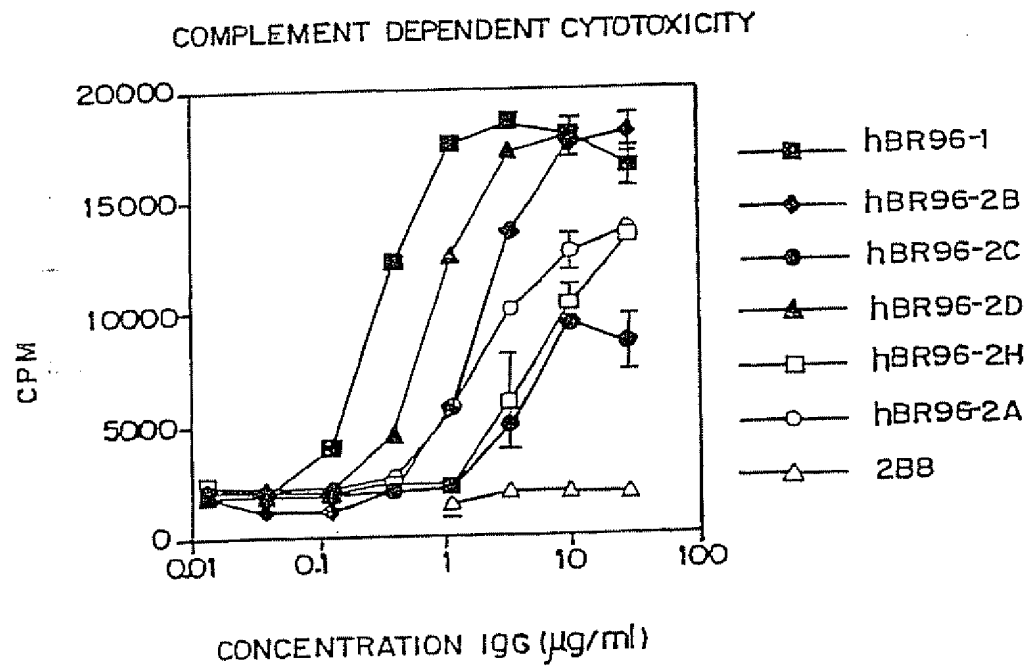
pD17-hG1b

7810	7820	7830	7840	7850	7860
CTGGCTAACT	AGAGAACCCA	CTGCTTACTG	GCTTATCGAA	ATTAAATACGA	CTCAGCTATAG
GACCGATTGA	TCTCTTGGGT	GACGAATGAC	CGAATAGCTT	TAATTATGCT	GAGTGATATC
7870	7880				
GGAGACCCAA	GCTT				
CCTCTGGGTT	CGAA				

ON0146A NP

45/53

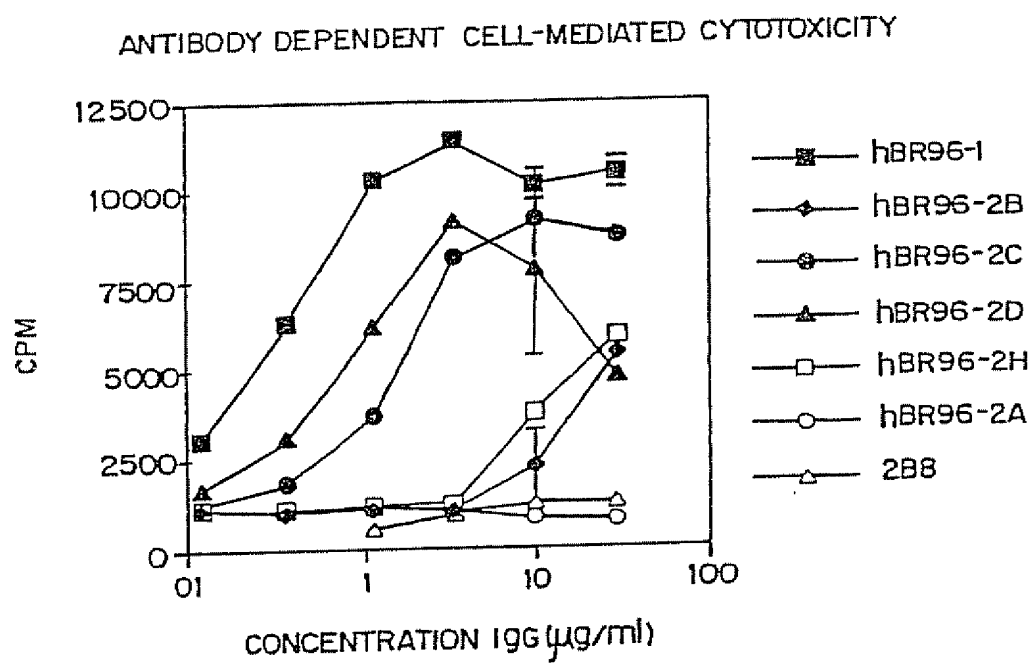
FIG. 20



ON0146A NP

46/53

FIG. 21

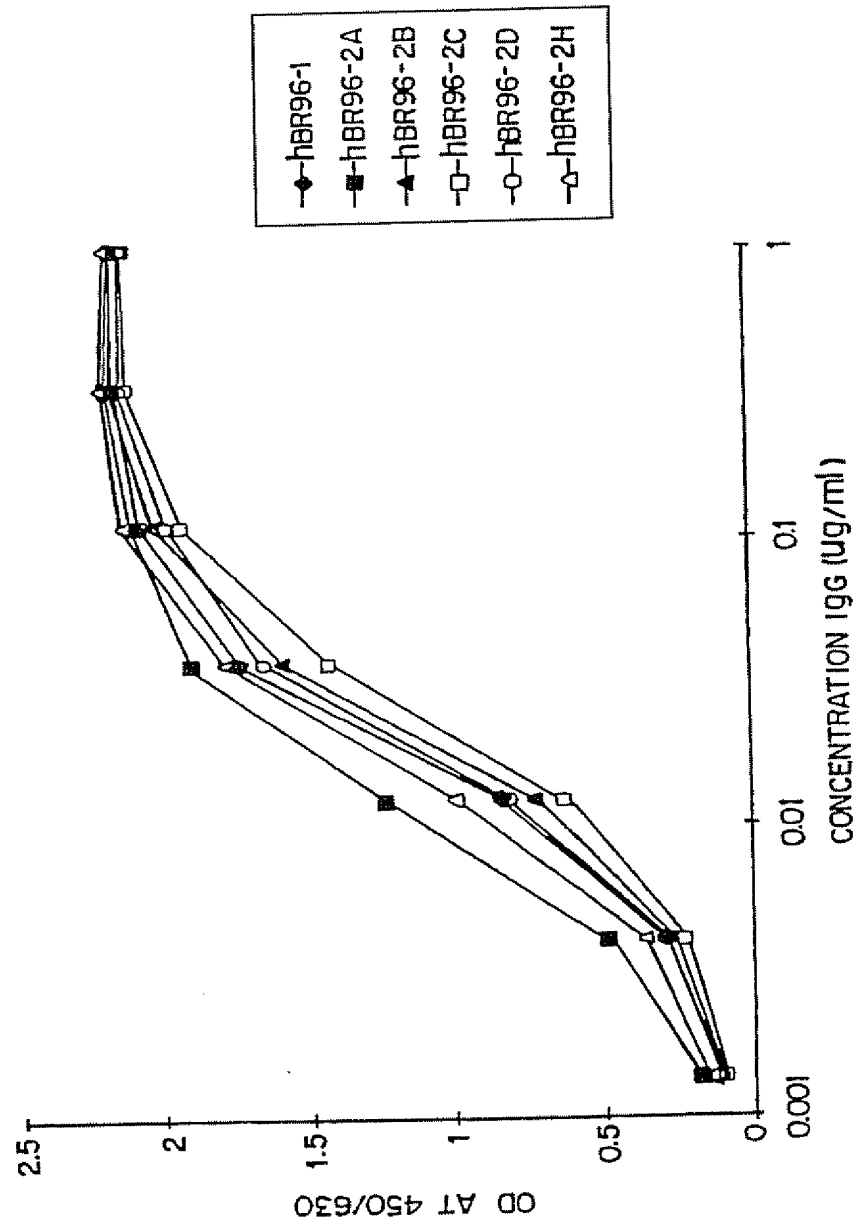


ON0146A NP

47/53

FIG.22

BINDING ACTIVITY OF hBR96-2 CONSTANT REGION MUTANTS ON LEY-HSA

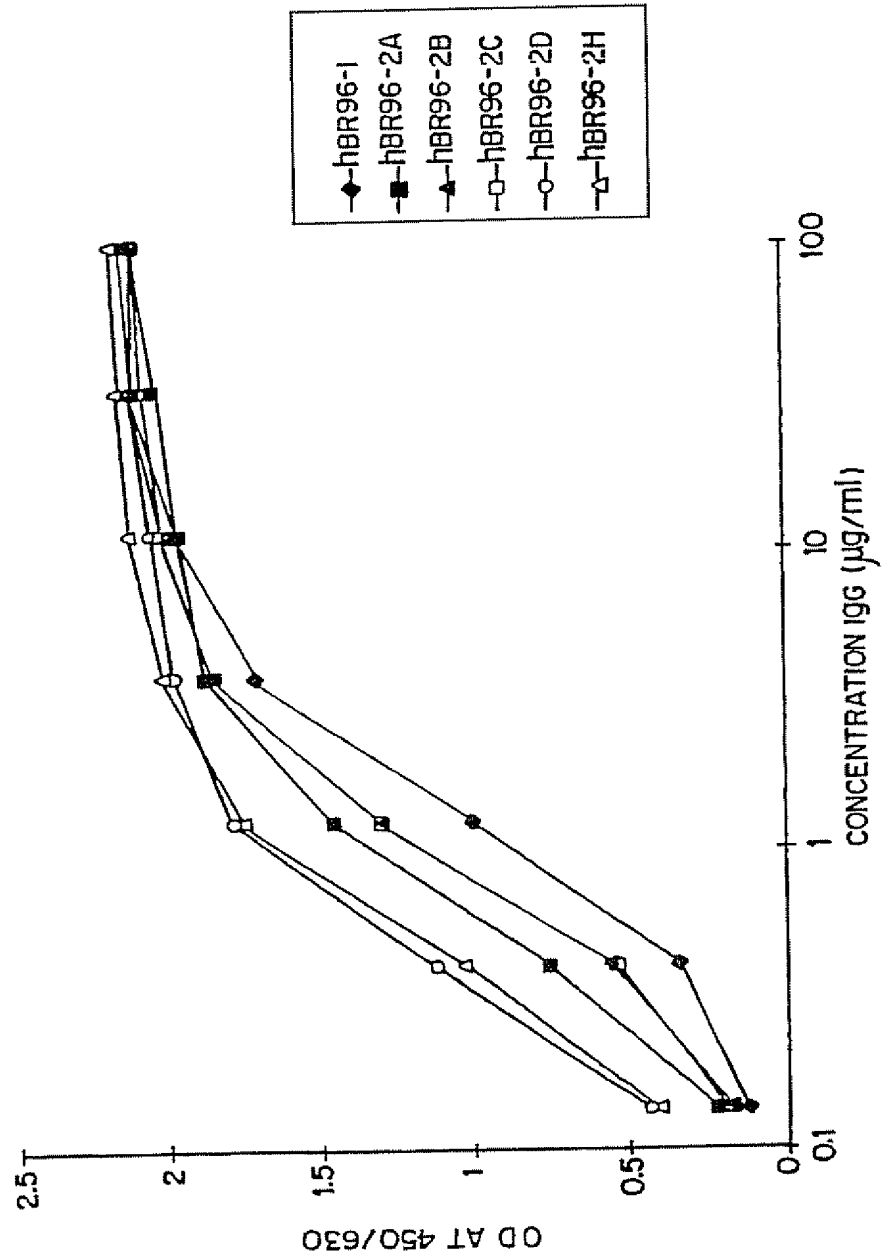


ON0146A NP

48/53

FIG.23

BINDING ACTIVITY OF hBR96-2 CONSTANT REGION MUTANTS ON LNFPIII-BSA



ON0146A NP

49/53

FIG. 24A

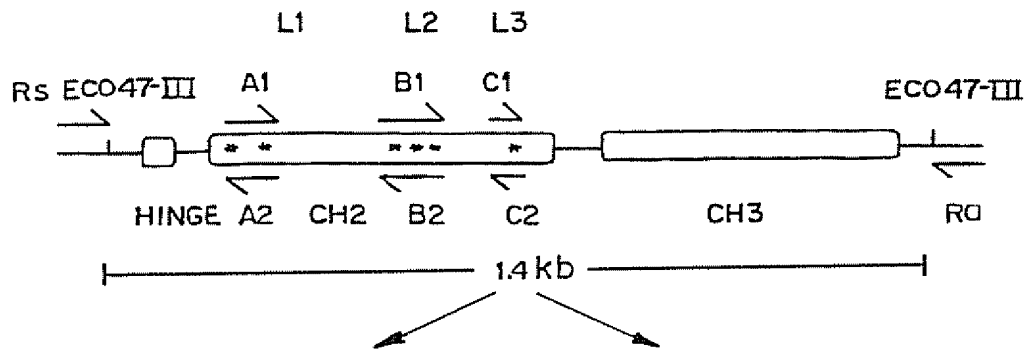
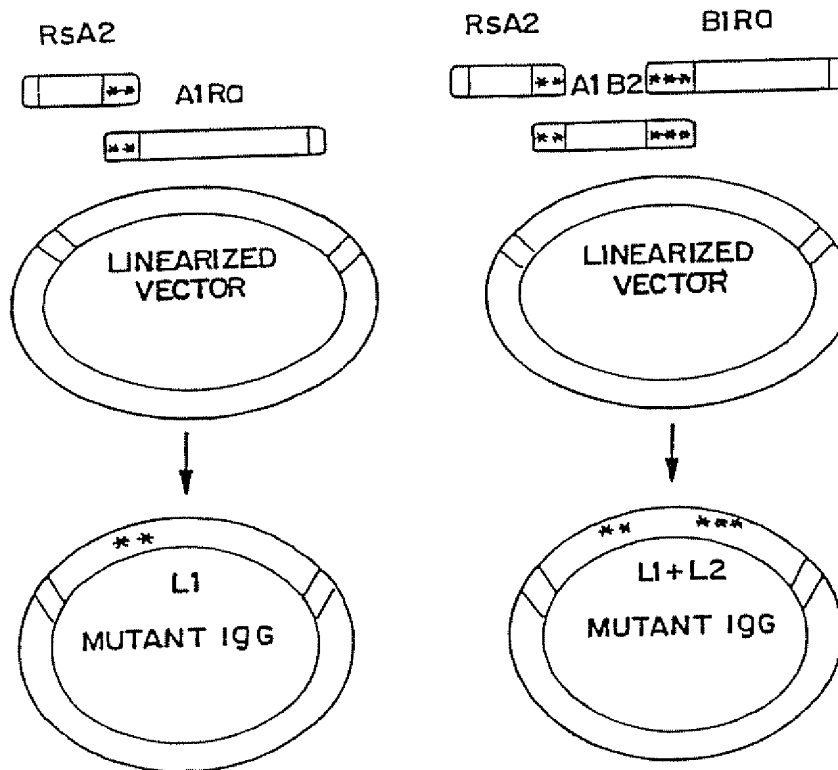


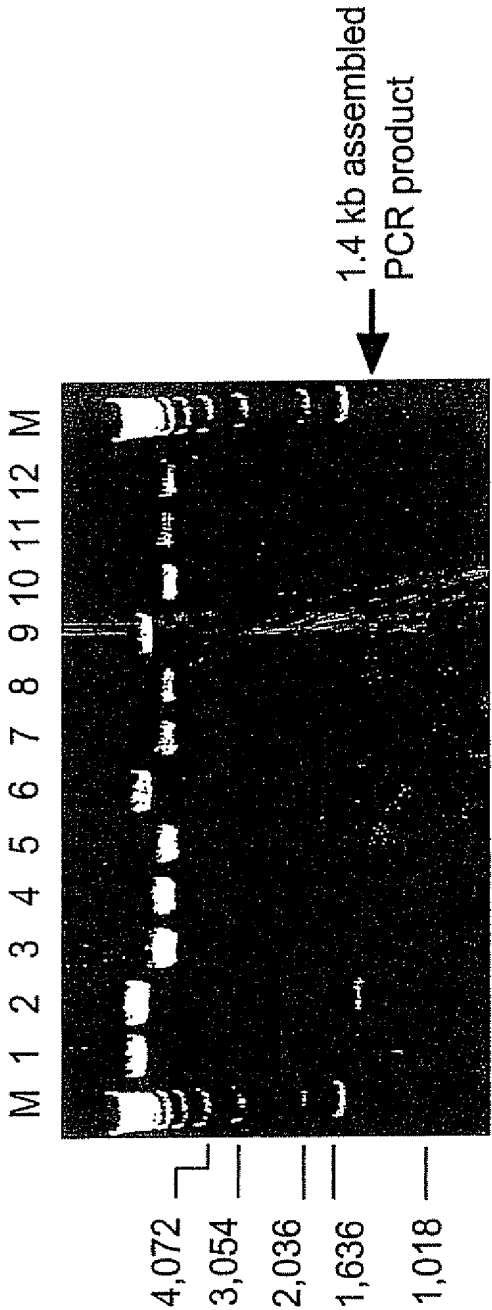
FIG. 24B



ON0146A NP

50/53

FIG.25



51/53

FIG. 26

hBR96-2 Heavy Chain Variable Region (V_H)

(SEQ ID NO:24)

```
1           11           21           31           41
EVQLVESGGG LVQPGGSLRL SCAASGFPFS DYMYWVRQA PGKGLEWVSY
51          61          71          81          91
ISQDGDITDY ADSVKGRFTI SRDNAKNSLY LQMNSLRDED TAVYYCARGL
101         111
ADGAWFAYWG QGTLVTVSS
```

Human IgG1 Constant

(SEQ ID NO:25)

CH1

A STKGPSVFPL APSSKSTSGG TAALGCLVKD

```
YFPEPVTVSW NSGALTSGVH TFP AVLQSSG LYSLSVTV PSSSLGTQTY
                                     CH2 235 237
ICNVNHKPSN TKVDKKVEPK SCDKTHTCPP CHAPELLGGP SVFLFPPKPK
DTLMISRTPE VTCVVVDVSH EDPEVKFNWY VDGVEVHNAK TKPREEQYNS
          318 320 322          331          CH3
TYRVVSVLTV LHQDWLNGKE YKDKVSNKAL PAPIEKTISK AKGQPREPQV
YTLPPSRDEL TKNQVSLTCL VKGFYPSDIA VEWESNGQPE NNYKTTTPVL
DSDGSFFLYS KLTVDKSRWQ QGNVFSCSVM HEALHNHYTQ KSLSLSPGK
```

52/53

FIG. 27

hBR96-2A: Heavy Chain Variable Region (V_H)

(SEQ ID NO:24)

```
1           11           21           31           41
EVQLVESGGG LVQPGGSLRL SCAASGFFFS DYMYWVRQA PGKGLEWVS Y
51          61          71          81          91
ISQDGDITDY ADSVKGRFTI SRDNAKNSLY LQMNSLRDED TAVYYCARGL
101         111
ADGAWFAYWG QGTLVTVSS
```

hBR96-2A: Human Heavy Chain IgG1 Constant Region Δ CH2

(SEQ ID NO:26)

```
A STRGPSVFPL APSSKSTSGG TAALGCLVKD YFPEPVTVSW NSGALTSGVH
TFPAVLQSSG LYSLSVVTV PSSSLGTQTY ICNVNHRPSN TKVDDRKVEPK
SCDKTHTCPP CP GQPREPQV YTLPPSRDEL TKNQVSLTCL VKGFYPSDIA
VEWESNGQPE NNYKTTTPVL DSDGSFFLYS KLTVDKSRWQ QGNVFSCSVM
HEALHNHYTQ KSLSLSPGK
```

53/53

FIG. 28

(SEQ ID NO:27)

This sequence is the chi BR96 IgG1 with CH2 deleted.

VH

```
1 EVNLVESGGG LVQPGGSLKV SCVTSGFTFS DYYMYWVRQT PEKRLEWVAY
51 ISQGGDITDY PDTVKGRFTI SRDNAKNTLY LQMSRLKSED TAMYVCARGL
    CH1
101 DDGAWFAYWG QGTLVTVSVA STKGPSVFPL APSSKSTSGG TAALGCLVKD
151 YFPEPVTVSW NSGALTSGVH TFPAVLQSSG LYSLSVVTV PSSSLGTQTY
    CH3
201 ICNVNHNKPSN TKVDKKVEPK SCDKTHTCPP CPGQPREPQV YTLPPSRDEL
251 TKNQVSLTCL VKGFYPSDIA VEWESNGQPE NNYKTTTPVL DSDGSFFLYS
301 KLTVDKSRWQ QGNVFSCSVM HEALHNHYTQ KSLSLSPGK
```